

UNIVERSITY OF KWAZULU-NATAL

**A CRITICAL INVESTIGATION OF THE IMPACT OF ON-
CONSUMPTION ALCOHOL OUTLETS ON LAND USE
COMPATIBILITY IN RESIDENTIAL AREAS IN THE
UMJINDI LOCAL MUNICIPALITY AREA OF
JURISDICTION, MPUMALANGA PROVINCE.**

By

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**A dissertation submitted in the fulfilment of the requirements for the
degree of**

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College of Humanities**

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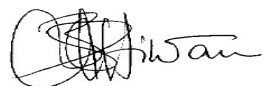
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- d) Fieldworkers who undertook field surveys that include land use survey and the administration of questionnaires to the study sample respondents.

Glossary of acronyms

EC:	Eastern Cape
ED:	Ehlanzeni District
EDM:	Ehlanzeni District Municipality
EMJ:	Emjindini
EMM:	EThekweni Metropolitan Municipality
EXT:	Extension
FET:	Further Education Training
GP:	Gauteng Province
IDP:	Integrated Development Plan
IPV:	Intimate Partner Violence
KZN:	KwaZulu-Natal
KPI:	Key Performance Indicator
LP:	Limpopo Province
LULUs:	Locally Unwanted Land Uses
LSS:	Low Socio-economic Status
MP:	Mpumalanga Province
MLB:	Mpumalanga Liquor Board
MSS:	Middle Socio-economic Status
NC:	Northern Cape
NQD:	Number of Questionnaire Distributed
NQR:	Number of Questionnaires Returned
NW:	North West
RSA:	Republic of South Africa
PPP:	Public Participation Process
SA:	South Africa
SAPS:	South African Police Services
SDF:	Spatial Development Framework
SPLUMA:	Spatial Planning and Land Use Management Act
TPS:	Town Planning Scheme
ULM:	Umjindi Local Municipality
US:	United State
WC:	Western Cape

Abstract

The compatibility of on-site consumption alcohol outlets as land use is predicted by the acceptance level of the utility or disutility they enjoy amongst residents in a neighbourhood. The density of alcohol outlets is argued in literature as correlating to the significant positive rate of amenity effects that include property crime, alcohol related arrests, drunk-driving, fatal and severe alcohol-induced accidents, violence and assault amongst many others. The problems associated with on-site consumption alcohol outlets have been insistently brought to the attention of the Umjindi Local Municipality in the Ehlanzeni District area in Mpumalanga Province by the residents of the Emjindini neighbourhood. The study is based on the hypothesis that the high density of on-site consumption alcohol outlets contributes to the incompatibility of such outlets with residential areas. In addressing the research sub-questions and validating the research hypothesis, the study adopted various methods (including land use surveys, interviews, administration of questionnaires, literature review and document review) for the collection, analysis, interpretation and discussion of data. The study reveals that the higher density of alcohol consumption outlets is significant in areas of low socioeconomic status. The Emjindini Townships are located with the density of 1 on-site consumption alcohol outlet per 263 people. Liquor legislation in South Africa leaves a lot to be desired in its guidelines for alcohol outlet density, public participation, location radius and local authority involvement. In addition, our findings showed that the significantly unacceptable level of impact thereof is experienced especially in the night, in areas characterised by the high density of on-site consumption alcohol outlets. The on-site consumption alcohol outlets are seen as compatible land uses in residential areas for the reason that, the unacceptable level of impact is insignificant during the day. The adoption of preferred and practical guidelines related to the locality and density of on-site consumption alcohol outlets, compatibility performance standards and public participation are recommended for policy and practice. The amendment to the liquor law is subsequently proposed in this study.

Key words: Land use planning, land use compatibility, liquor outlets, density of on-site consumption alcohol outlets

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1. CHAPTER 1: INTRODUCTION AND RESEARCH BACKGROUND

The study focuses on the investigation of the **impact of on-site consumption alcohol outlets on land use compatibility in residential areas**. This chapter provides the background of the research through a discussion of the problem statement (1.1), exposition of the research problem (1.2), research aim and objectives (1.3), research sub-questions (1.4), research hypothesis (1.5), research theoretical framework (1.6) and research conceptual framework (1.7). The chapter concludes with a discussion on the structure of the research.

1.1 Problem statement

On-site consumption alcohol outlets include among others restaurants, bars, nightclubs taverns, and ballparks where alcohol is largely or entirely consumed in the establishment while off-premises settings include grocery, mini-markets, liquor stores and convenience stores (Tatlow *et al.*, 2000:81; Bieler and Roman, 2013:2; Campbell *et al.*, 2009:556; Mackinnon *et al.*, 1995:591 and Livingston, 2008: 625). Taking off from this parameter, the “on-site consumption” conception is expanded and applied in this research as “on-site consumption” to refer largely to alcohol consumed on-site. The most predominant type of on-site consumption alcohol outlet found in black South African residential areas is known as “taverns” or “shebeens”. In literature, there is no standard definition of the term “tavern”, however only three pieces of legislation in the country provide distinct and sometimes related definitions which can be summed up as follows:

In terms of the Gauteng Liquor Act, 2003 (Act 2 of 2003), a tavern refers to any place whose main business is the supply of liquor, food and various forms of entertainment. According to the KwaZulu-Natal Liquor Act, 2010 (Act 6 of 2010) a tavern is defined as the residentially zoned premises where liquor is sold for consumption on the premises, and where food may be provided incidentally thereto. The Free State Gambling and Liquor Act, 2010 (Act 6 of 2010) defines a tavern as a place whose main business is the supply of liquor and includes a pub and a pool club.

In the context of this study, all on-site consumption alcohol premises in residential areas are considered as taverns. It is evidenced in literature that the highest number of alcohol outlets, in particular on-site consumption alcohol outlets, is found in low socioeconomic areas (Campbell *et al.*, 2006 and Teh (2007).

In the Umjindi Municipal area, in particular, Barberton, the high number of on-site consumption alcohol outlets is found in the black communities (Emjindini Townships) which have the high population rate of unemployment. The Umjindi local authority often receives complaints and statements of discomfort from residents in regard to the impacts of alcohol outlets in residential areas. The volume of complaints makes it relevant for the impact of on-site consumption alcohol outlets on land use compatibility in residential areas to be explored, investigated and interrogated further. Internationally, studies (such as studies in Netherlands, Los Angeles, USA and Brazil) have found that there is a significant relationship between on-site consumption alcohol outlets and crime rates (especially assault and homicide) and traffic related accidents to name but a few.

It is therefore imperative for the study to be commissioned to establish if the impact caused by on-site consumption alcohol outlets make such outlets compatible with residential areas. Land use compatibility refers mainly to the highest extent of land use harmony that exists with surrounding land uses in terms of interdependency, social, environmental and economic benefits including other related physically acceptable benefits. The compatibility and guidelines of alcohol outlets in residential areas are in effect a matter that has to be defined in land use management schemes of local authorities. In the current situation (of the Umjindi local authority), alcohol outlets are permitted land uses within a business land use zone in land use policies. Policies and By-Laws of municipalities are considered as conduits through which land use compatibility is achieved. The factors that define the compatibility of on-site consumption alcohol outlets in residential areas are not well stipulated in law or policies that relate to alcohol outlets. It is therefore necessary for the problem to be exposed in terms of its background and the significance for studying it.

1.2 Exposition of the problem

In order for the research problem to be concisely articulated and understood, the need for the exposition thereof is the first priority. The problem statement of the research will then be explained in terms of its background and significance of why it was studied.

1.2.1 Background of the problem

The Umjindi Local Municipality is made up of rural and urban areas. The urban area consists of the Barberton Township (white community dominated) and Emjindini Townships including mushrooming related areas (black community dominated). The rural area comprises of a number of villages which are distinct in nature and aerial extent. The details thereof are discussed in Chapter 2 of the report. It is an undisputed fact from the municipal records that there is no policy that is applicable in the municipality for the establishment and operation of on-site consumption alcohol outlets or alcohol outlets in general. The high number of existing alcohol outlets in the municipality in particular, Emjindini Townships is a cause for concern. The extent of the densification of these outlets remains uncounted or unrecorded. The impact (socioeconomic) resulting from the operations of on-site consumption alcohol outlets contribute to the criticism that is generally levelled against the municipality by the members of the community. This criticism includes the incompatibility of such land uses with residential areas as a result of associated unacceptable impacts (crime, traffic effects and noise pollution). In expressing their discontent, residents often make submissions of complaints to the municipality regarding the impact of on-site consumption alcohol outlets in their vicinity. The municipality always falls back on the fact that most of the alcohol outlets within the municipality are illegal hence the number of legal and illegal alcohol outlets remains unidentified. The absence of policy guidelines for the location of on-site consumption alcohol outlets renders it impossible and cumbersome for the municipality to define their compatibility in residential areas.

1.2.2 Significance of the study

It is the contention of Melville *et al.* (1996:1) that studying a problem through research aids in expanding the boundaries of our ignorance and the unknown. The broad sense of the socioeconomic impact of on-site consumption alcohol outlets on the land use compatibility in residential areas of the Umjindi Municipality can only be well understood through action research. The study will reveal the unrecorded facts of existing alcohol outlets in residential areas and their legal status. It is through the research that the main anomalies caused by on-site consumption alcohol outlets in residential area can be uncovered. The problem of land use compatibility of on-site consumption alcohol outlets is succinctly investigated and presented through the study. In literature, Haines and Geham (2005) argue that on-site consumption alcohol

outlets are centers for social interactions which have the ability to invoke violence. The socioeconomic impact of these outlets is said to include crime, competition, health hazards, job creation and income generation, fears and safety and social cohesion (EMM, 2013). The study will therefore expose the impact of on-site consumption alcohol outlets in the urban residential areas of the Municipality. This impact will be analysed in terms of its acceptability level in order to define its compatibility. It is through the study that guidelines for the compatibility of on-site consumption alcohol outlets can be recommended.

1.3 Aim of the research and research objectives

In the light of the aforementioned problem statement, the main aim of the research is thus to critically investigate the impact of on-site consumption alcohol outlets on land use compatibility in residential areas in the Umjindi Local Municipality.

1.3.1 Research objectives

In an attempt to respond to the main aim of the research the following research objectives were set to be achieved:

1. To determine the legal mandate providing guidelines for the establishment of alcohol outlets.
2. To explore the debates relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets.
3. To determine the extent of on-site consumption alcohol outlets densification in the Umjindi Municipal area of jurisdiction.
4. To investigate the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and the current applicable control measures.
5. To explore or define preferred and practical guidelines for ensuring that on-site consumption alcohol outlets are compatible with land uses in residential areas.

1.4 Research sub-questions

In an attempt to achieve the main aims and objectives of the research the following research sub-questions will be addressed:

1. What is the legal mandate for providing guidelines for alcohol outlets?
2. What are the debates relating to the impacts of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets?
3. To what extent are on-site consumption alcohol outlets densified in the Umjindi Municipal area of Jurisdiction
4. What is the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures are applied in addressing them?
5. What are the preferred and practical guidelines that can be adopted to ensure that on-site alcohol consumption outlets are compatible with land uses in residential areas?

1.5 Research hypothesis

The study is based on the hypothesis that “the high density of on-site consumption alcohol outlets contributes to the incompatibility of such outlets with residential areas”. The hypothesis results from evidence that exists in literature that areas with higher number of on-site consumption alcohol outlets have a significant correlation with areas experiencing higher rate of crime, higher rate of traffic accidents, higher rates of alcohol consumption and related impact. It is the anticipation of the research that the results on the existing outlets will clearly provide a spatial orientation of the status quo and related impacts. The research intends to demonstrate the validity of this hypothesis.

1.6 Research theoretical framework

A theoretical framework assists in engineering the basis for the study (Radhakrishna *et al.*, 2007: 692). It further explains the relationship between variables of the phenomena studied and the hypothesis and general research question in the study (Radhakrishna *et al.*, 2007:693; Camp 2001:10 and Leshem and Trafford, 2007:97). Leshem and Trafford (2007:97) argue that the choice of questions of a successful empirical study is based on theory. In contrast, theories add to the explanation and understanding including the predictions of new discoveries on a phenomena being observed (Camp 2001:10). The theoretical framework of the research is founded on the social justice theory (utilitarianism) and availability theory.

1.6.1 Social justice theory

The provenance of the term social justice is in the mid-nineteenth century when it was coined by an Italian Philosopher Luingi Taparelli (Taherzdeh, 2012:3). The author states that Taparelli viewed social justice as natural principles and morals in a just society which is characterised by the distribution of benefits and perplexing problems. In the recent years, the term social justice has gained recognition internationally from academics, theorists, philosophers and politicians. Social justice is considered as primarily an ideal which seeks to promote a fair society by the equal distribution of goods and services to improve the quality of life in particular for the disadvantaged (Duffy, 2010: 259 and Bankston III, 2010: 165). The discourses of social justice have evoked a number of theories which include utilitarianism, liberalism, Marxism, capability approach, citizenship and egalitarianism. Most of these theories are discrete and have attracted criticism respectively. It is argued in literature that in South Africa, apartheid left a legacy of injustice that involves the spatial disorganization which is characterized by land use mismatches, fragmented spatial/settlement pattern and economic imbalances (Hindson *et al.*, 1992:6 in Maharaj, 2003). Planning in the study is considered as the conduit for the attainment of equal distribution of goods and services by the allocation of land uses in terms of their compatibility with other land uses. In addition, in accordance with the principle of social justice, it can be further argued that the distribution of goods (land uses for production e.g. centers of economic activities) and services (infrastructure and land uses for institutions) to a society should be proportional in terms of ration and density to avoid detrimental consequences.

The consequences of the distribution of goods and services through planning dictate the compatibility of such uses. The study at hand has its basis on the utilitarianism perspective of social justice theory. This perspective relates to the calculated total of utility of an individual (Taherzdeh, 2012:3).

1.6.1.1 Utilitarianism perspective

The utilitarianism perspective is about “utility”. Burns and Hart (1970:12) define utility as the property in any object which yields pleasure, good or happiness, benefits and advantages to those whose interests are considered. The emphasis of this perspective is mainly on the sum of happiness or pleasure (utility) an individual enjoys from an institution, facility, law or applied action/choice (Taherzdeh, 2012:3). The author further states that in terms of utilitarianism, decision, actions and choices are judged by the level of happiness or pleasure created to an individual. In contrast, the loss of utility in comparison to achievements leads to lower level of happiness in society therefore constituting social injustice (Taherzdeh, 2012:3). The utilitarianism perspective has however been criticized by Sens and John Rawls (Taherzdeh, 2012:4 and Laden, 2004). Braybrooke (2003:44) and Barrett *et al.* (2004:19) state that one of the objections to this perspective is that utilitarianisms require sacrifices by other people to guarantee the happiness of others therefore neglecting basic rights. For instance, the felicific calculus (sum of utility) of people consuming alcohol in residential areas with high densification of on-site consumption alcohol outlets exceeds the disutility of people not consuming alcohol.

In addition, Braybrooke (2003:44) presents that, it is imperative for the utilitarianism to be considered from the notion of comparative censuses other than only the statistical notion (felicific calculus). Sen’s critique of the utilitarianism is that the use of utility as a metric tool to favour the marginalized has failed to consider non-utility characteristics such as freedom and rights (Taherzdeh, 2012:4). The author further presents that Sen argues that the felicific calculus of utilitarianism fails to gauge inequalities in the distribution of pleasure or happiness in society and the perspective further omits the recognition of individual mental character in its application. Laden (2004: 279-280) states that Rawls criticises the utilitarianism perspective for failing to make a distinction between persons seriously at a content of the principles level (equality on distribution) and at the form of argument level (relies on choices for a single individual which are generalized to the entire society).

It is the hypothesis of the study that the high density of on-site consumption alcohol outlets contributes to the incompatibility of such outlets in residential areas. The incompatibility in terms of utilitarian perspective is defined by the comparison of utility and disutility calculus (level of happiness or pleasure about the existence of a land use) of the society. It can therefore be said that the comparisons of the positive and negative impacts (social and economic) that result from a land use define the compatibility of such land use with other land uses. Land use compatibility should be viewed as the channel for the realization of social justice in the context of land use distribution in a society. In a just society, consequences of land uses should be acceptable to the society without the infringement of fundamental rights of persons. The utilitarian perspective provides the basis for studying the compatibility of alcohol outlets in residential areas.

1.6.2 Availability theory

The availability theory relates to the availability of alcohol in a particular neighbourhood. Mackinnon *et al.* (1995: 592), Laranjeira and Hinkly (2002:456) and Humphreys *et al.* (2013:2) indicate that, under the principle of this theory, the availability of alcohol in an area increases the prevalence of physical and social problems and further increases the level of alcohol consumption. Palk *et al.* (2009:32) present three assumptions of the availability theory as also presented by Single (1988) and they are as follows:

- a) the greater the availability of alcohol in a society the higher the average consumption of its population;
- b) the higher the average consumption of the population then the greater number there will be of excessive drinkers; and
- c) the greater the number of excessive drinkers in a population the greater the extent of adverse health and social problems stemming from alcohol use.

This theory has been criticised by Stockwell and Groenewald who argue that the propositions of the theory present a deterministic point of view which is in contrary to the experience of many researchers (Stockwell and Groenewald, 2004:216). Stockwell and Groenewald (2004:217) therefore provided an expansion of the elementary propositions of the Availability Theory (as proposed by Single, 1988) which is paraphrased as follows:

1. Changes in alcohol availability by the greater extent of alcohol availability in a neighbourhood contribute to the increase on the average level of consumption of its population in particular when such changes reduce the “all-inclusive price” of alcohol, e.g. the actual price of beverages at on-site consumption and off-site consumption premises including the travelling costs to and from outlets selling liquor.
2. Changes in alcohol availability by the greater extent of alcohol availability in a neighbourhood directly result to alcohol-related harm in particular when such changes impacts the “routine drinking activities and behaviours” of drinkers e.g. consumption of alcohol at on-site consumption premises (bars, taverns etc.) vs. at home and consumption of alcohol socially vs. alone.
3. The dimensions of drinking, quantities consumed and variances in drinking levels, frequencies of alcohol use and rates of abstention amongst others are correlated to the increases in drinking among some segments of the population as a result of the greater average consumption level in a population.
4. Significant adverse health and social harms which are consequences of alcohol use are evident across the alcohol consumption population, focused in those populations which are marginalised (low socioeconomic status) and mostly exposed to risk. These risks definitely vary from population and subgroups, depending on various routine drinking activities and behaviours (2, above) and drinking patterns (3, above).

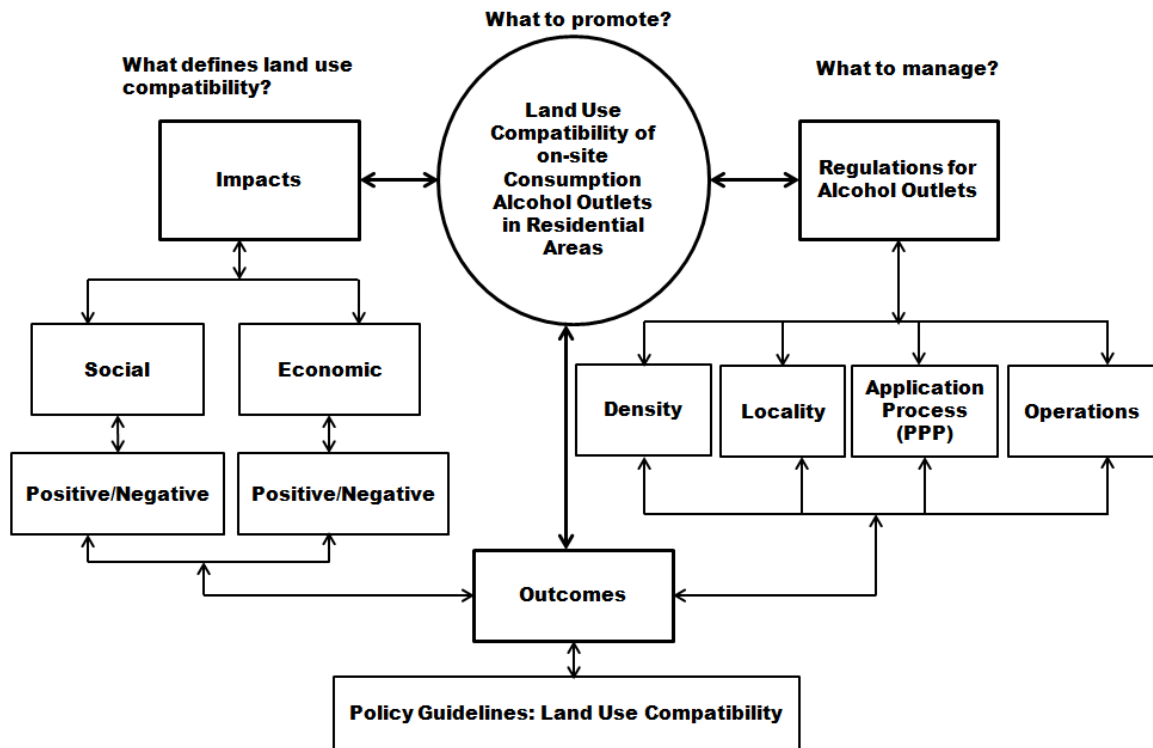
Nevertheless, alcohol outlets remain the main centers for distributing alcohol through on-sale or off-sale premises, in terms of the availability theory they contributes to the prevalence of social problems and the levels of alcohol consumption. Branas *et al.* (2009:2) discusses that most studies on this subject have failed to present the risk which maybe suffered by individuals (consuming alcohol) in accessing areas with the high availability level of alcohol outlets. On the other hand, Cunradi (2010: 800) explains that the greater number of the availability of alcohol outlets within a specific residential area may be a sign of social disorganisation which further contributes to the prevalence of violence and other social harms. It is the proposition of the availability theory as provided by Single (1998) that the greater extent of adverse health and social problems in a given area are associated with the higher number of excessive alcohol drinkers. Humphreys *et al.* (2013:1) present that internationally, societies have adopted polices to restrict the time and place where alcohol is consumed and such measures are considered as consistent with the “availability theory”.

The unacceptable socioeconomic impact resulting from the availability of alcohol outlets therefore contributes to the incompatibility of alcohol outlets with residential areas. This notion may however become relevant if there are a greater number of alcohol outlets in a neighbourhood which therefore results to cumulative effects. For example, if there is a high density of alcohol outlets in a neighbourhood, there is a high probability for the neighbourhood to have the higher rate of alcohol consumption which is associated with the higher number of social ills (crime, health hazards, traffic crashes, violence, social disorganisation etc.). In line with this perspective, the availability of guidelines for the densification and location of alcohol outlets may increase the level of compatibility and reduce the prevalence of social and physical ills including the level of alcohol consumption.

1.7 Research conceptual framework

Miles and Huberman (1983:33) define research conceptual framework as the researcher's mind map on what is being investigated. A conceptual framework provides the theoretical overview of the envisioned study and the manner of its execution and envisaged outcomes (Leshem and Trafford, 2007:96). Robinson (1993:150-151) in Leshem and Trafford (2007:97) argues that a conceptual framework allows the researcher to express the intention of the research vividly. The author further states that the conceptual framework assists the researcher in being selective on important features and their relationship to be considered for data collection and analysis. A conceptual framework therefore fulfills the role of providing a theoretical perspective of what is being investigated and further explicitly presents the intended deliverables of the research including the approach for achieving them (Leshem and Trafford, 2007:97). It further provides an all-inclusive understanding of a phenomenon or phenomena through a system of interconnected concepts (Jabareen, 2009:51). Thus, a conceptual framework is the overview of the researcher's idea about the research, its approach and envisaged outcomes. In this study, the conceptual framework is the basis through which the study is visualized. The figure below provides the conceptual framework of what the study is about.

Figure 1-1: Research Conceptual Framework



Source: Own construction, 2013

It is clear from the above figure that the study focuses on the impact of on-site consumption alcohol outlets in residential areas. It is further presented in the diagram that the level of impact of land use (in particular on-site consumption alcohol outlets) defines its compatibility. The graph indicates that in order to promote the compatibility of on-site consumption alcohol outlets with residential areas there is a need to manage the regulation of alcohol outlets in terms of density, locality, application process and operations. The regulation of alcohol outlets through policy guidelines is envisaged as the strategy for achieving their land use compatibility in residential areas.

1.8 Structure of the research

The research structure provides an understanding of the flow of research ideas from the statement of the problem to the research questions including the methodology bestowed in achieving the research aim.

The research adopted phases, which are related to the research objectives, sub-questions and methods. These phases succinctly summarised hereunder integrate 6 chapters identified for the research.

1.8.1 Phase 1: Rationale and methodology

Phase 1 provides the background of the study and methods applied in achieving the research objectives. This phase comprises of the following chapters:

- Chapter 1: Introduction and research background

This chapter introduces the research through a discussion of the problem statement, exposition of the research problem, research aim and objectives, research sub-questions, research hypothesis and research conceptual framework. Lastly, the chapter concludes with an outline of the structure of the research.

- Chapter 2: Research methods

The chapter provides an in-depth discussion of the methods applied in the attainment of the project aim and responding to research questions presented in Chapter 1.

1.8.2 Phase 2: Preparation and Debate

This phase prepares the researcher in understanding the conceptual or theoretical and legislative framework that relates to land use compatibility, alcohol outlets, their impacts and regulations. The rationale for this phase is mainly to respond to the research sub-questions 1 and 2 as embedded in Section 1.4 above. The phase consists of the following chapters:

- Chapter 3: Literature Review

The chapter provides the debate on the impact of on-site consumption alcohol outlets in residential areas, density and location of these alcohol outlets including case studies related to the mentioned aspects. The debate on land use compatibility is also discussed in this chapter to determine compatibility indicators for land uses.

- Chapter 4: Review of legislative and policy framework in South Africa

This chapter provides a review and an evaluation of legislative and policy framework for the regulation of alcohol outlets/liquor licensing. Experiences in terms of the regulation of on-site consumption alcohol outlets for the Umjindi Local Municipality are also defined.

1.8.3 Phase 3: Collect, analyse and interpret

Phase 3 is considered as the core phase of the research as it provides answers to research sub-questions 3 to 5 (outlined in section 1.4). The data collected are analysed and interpreted through research methods outlined in Chapter 2.

- Chapter 5: Data analysis, interpretation, presentation and discussion

This chapter presents the findings of the research. The extent of the density of alcohol outlets in each identified case study is evidently stated. The comparison of findings on the number and property description of existing outlets with the approval records of the Mpumalanga Liquor Board is also presented in this chapter. The impacts experienced by residents (per case area) as a result of the existence of alcohol outlets in residential areas are compared and deliberated in this chapter. The chapter further presents the current application process followed for the approval of liquor licenses. Recommendations made by respondents for ensuring land use compatibility of on-site consumption alcohol outlets form part of the chapter.

1.8.4 Phase 4: Recommendation and conclusion

This phase provides a summary of the research by recommending areas for further research and the guidelines for ensuring the compatibility of on-site consumption alcohol outlets with residential areas. This phase includes the following chapter:

- Chapter 6: Summary, conclusion and recommendations

This chapter concludes the research by providing a detailed summary of the research and conclusion presenting the manner in which the research sub-questions were responded to, including the confirmation of the validity of the research hypothesis. The chapter further provides recommendations for the expansion of research focus of the study and guidelines which may be adopted to promote the compatibility of on-site consumption alcohol outlets with residential areas. Table 1-1 below provides a summary of the research structure as discussed in Section 1.8 above.

Table 1-1: The Research Structure

A CRITICAL INVESTIGATION OF THE IMPACT OF ON-CONSUMPTION ALCOHOL OUTLETS ON LAND USE COMPATIBILITY WITH RESIDENTIAL AREAS IN THE UMJINDI LOCAL MUNICIPALITY AREA OF JURISDICTION, MPUMALANGA PROVINCE					
RESEARCH MAIN AIM (Refer to Chapter 1, Section 1.2)	RESEARCH OBJECTIVES (Refer to Chapter 1, Section 1.2)	METHODS (Refer to Chapter 2)	PHASES	CHAPTERS (Refer to Section 1.8)	
To critically investigate the impact of on-site consumption alcohol outlets on land use compatibility with residential areas in the Umjindi Local Municipality.	1. To determine the legal mandate providing guidelines for alcohol outlets.	Literature and Legislative Review (Refer to Chapter 2)	Phase 2: Preparation and Debate	Chapter 3 and 4: Literature and Legislative/Policy Review	Phase 1 : Rationale and methodology
	2. To explore the debates relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets.				
	3. To determine the extent of on-site consumption alcohol outlets densification in the Umjindi Municipal area of Jurisdiction.	Field Survey, Interviews and Administration of Questionnaire (Refer to Chapter 2)	Phase 3: Collect, analyse and interpret	Chapter 5: Case study and data analysis	
	4. To investigate the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and the current applicable control measures.				
	5. To explore or define preferred and practical guidelines for ensuring that on-site consumption alcohol outlets are compatible with land uses in residential areas.	Document Review and Interviews (Refer to Chapter 2)	Phase 4: Recommend and conclude	Chapter 6: Research summary, conclusion and recommendations	

Source: Own construction, 2013

1.9 Summary of research introduction and background

The chapter presents the problem statement as it relates to the compatibility of on-site consumption alcohol outlets within residential areas. The main aim of the study is articulated as being to critically investigate the impact of on-site consumption alcohol outlets on land use compatibility with residential areas in the Umjindi Local Municipality. Five research sub-questions aligned with specific objectives of the research are presented to guide the researcher on the issues to be addressed. The chapter discusses two theories that are the basis of the study notably the utilitarian and availability theories respectively. The utilitarian theory is viewed as a perspective that considers the sum of happiness or pleasure (utility) an individual enjoys from an institution, facility, law or applied action/choice. In the context of the study, the utility and disutility of individuals on the acceptance of impact associated with alcohol outlets in residential areas defines the compatibility of alcohol outlets. The availability theory is viewed in the chapter as related to the availability of alcohol and concomitant amenity effects. The chapter further presents a conceptual framework that mapped the intention of the researcher on the realisation of research objectives. The set-up or structure of the research is fully presented and has identified four phases and six chapters for the research respectively.

2. CHAPTER 2: RESEARCH METHODS

Research is not only reduced to a process of data collection, as is often posited; rather it is about responding to unanswered questions or creating a new understanding or knowledge, which is unknown (Melville *et al.*, 1996:1). It can be viewed as a step-by-step process of understanding problems, exploring ideas and solving problems. This chapter therefore explains the methodological approach applied in the successful realisation of the main aims of the research as presented below:

To critically investigate the impact of on-site consumption alcohol outlets on land use compatibility with residential areas in the Umjindi Local Municipality.

Research is argued by Bailey (1982: 21) as classified into two categories that include pure or applied research. The author presents that pure research has no application to social problem as it involves developing and testing of theories and hypotheses. On the other hand, the author explains applied research as a research that results to findings which can be applied in addressing social problems of immediate concern. The study at hand is related to the impact of on-site consumption alcohol outlets on land use compatibility with a residential area. The presence of alcohol outlets in residential areas indirectly or directly contributes to social problems which are largely or entirely addressed through land use planning and other policies. Therefore, this study is considered as an “applied research exercise” aimed at answering research sub-questions and recommending preferred guidelines for the promotion of land use compatibility (in residential areas) in the quest to address social effects of alcohol outlets. The study has adopted certain elements of pure research by presenting a theoretical framework in the context of the study. In addition, the study is more descriptive (provision of details of affected community, impacts of alcohol outlets and outlet density in a residential area) than explanatory. Descriptive studies generally attempt to describe a phenomenon in great details as opposed to explanatory studies that generally attempts to explain a phenomenon by stating why or how it happened (Bailey, 1987:38). It can be argued that the successful delivery of a research is through practically tested research methods. In literature, research methodology is defined by Bailey (1987:32) as a philosophical or rational process of research that incorporates the assumptions, morals and values that serve as the rationale for the study and standards the researcher applies for the collection, interpretation, analysis and discussion of data and reaching conclusions.

It is the view of Strauss *et al.* (1998:1) that research methodology is a technique applied in perceiving and thinking about and investigating social reality. Research methodology is an approach that incorporates tools that a researcher uses in data collection, analysing interpretation and discussion in studying a phenomenon. The chapter explains the approaches or methods adopted in the delivery of the research objectives in detail. The chapter further entails four sections, which include research design in Section 2.1, followed by Section 2.2 which provides a far-reaching description of research methods, which consist of the case study selection method, land use survey, document review, literature review, administration of questionnaires and interviews. The methods discussed and applied herein are selected on their undisputed advantages of addressing the research sub-questions. Ultimately, the chapter concludes with a discussion of the limitations experienced during the course of the research process.

2.1 Research design

Research design is the plan that guides the researcher in the process of data collection, analysis, interpretation and discussion (Nachmias & Nachmias, 1982:75). The main objective of research design is to plan and structure a research project by maximising the validity of research findings through either reducing or, where possible, obviating potential errors (Mouton, 1996:108). The research as part of its plan to realise the research objectives adopted a mixed research method. The adoption of the plan (mixed research method) is supported in literature by the argument of Barnes (2012:463) that, recently social sciences have experienced an alarming volume of interest in the mixed research methods. Mixed research methods are referred to as the research methods that mix or combine qualitative and quantitative approaches, concepts, methods, techniques in a single study for data collection, interpretation, analysis and discussion (De Silva, 2011:93; Johnson and Onwuegbuzie, 2004:17). This approach is favoured in this research as the study incorporates the collection of qualitative and quantitative data. It can thus be expediently mentioned that the study is both a qualitative and quantitative research process. Strauss *et al.* (1998:11) presents qualitative research as any study that yields results not derived at by statistical (numerical) procedures or other means of quantification that includes research about a person's life, lived experiences, emotions, behaviours, attitudes and feelings as well as about institutional functioning, social movements, cultural phenomena and interactions between nations. The table below presents a strategic plan showing the distribution of mixed approaches against the research objectives.

Table 2-1: Mixed Research Approach against Research Objectives

NO.	RESEARCH OBJECTIVE	RESEARCH APPROACH
1	To determine the legal mandate providing guidelines for alcohol outlets.	Qualitative
2	To explore the debate relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets.	Qualitative
3	To determine the extent of on-site consumption alcohol outlets densification in the Umjindi Municipal area of Jurisdiction.	Qualitative and Quantitative
4	To investigate the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and the current applicable control.	Qualitative and quantitative
5	To explore or define preferred and practical guidelines for ensuring that on-site consumption alcohol outlets are compatible with land uses in residential areas.	Qualitative

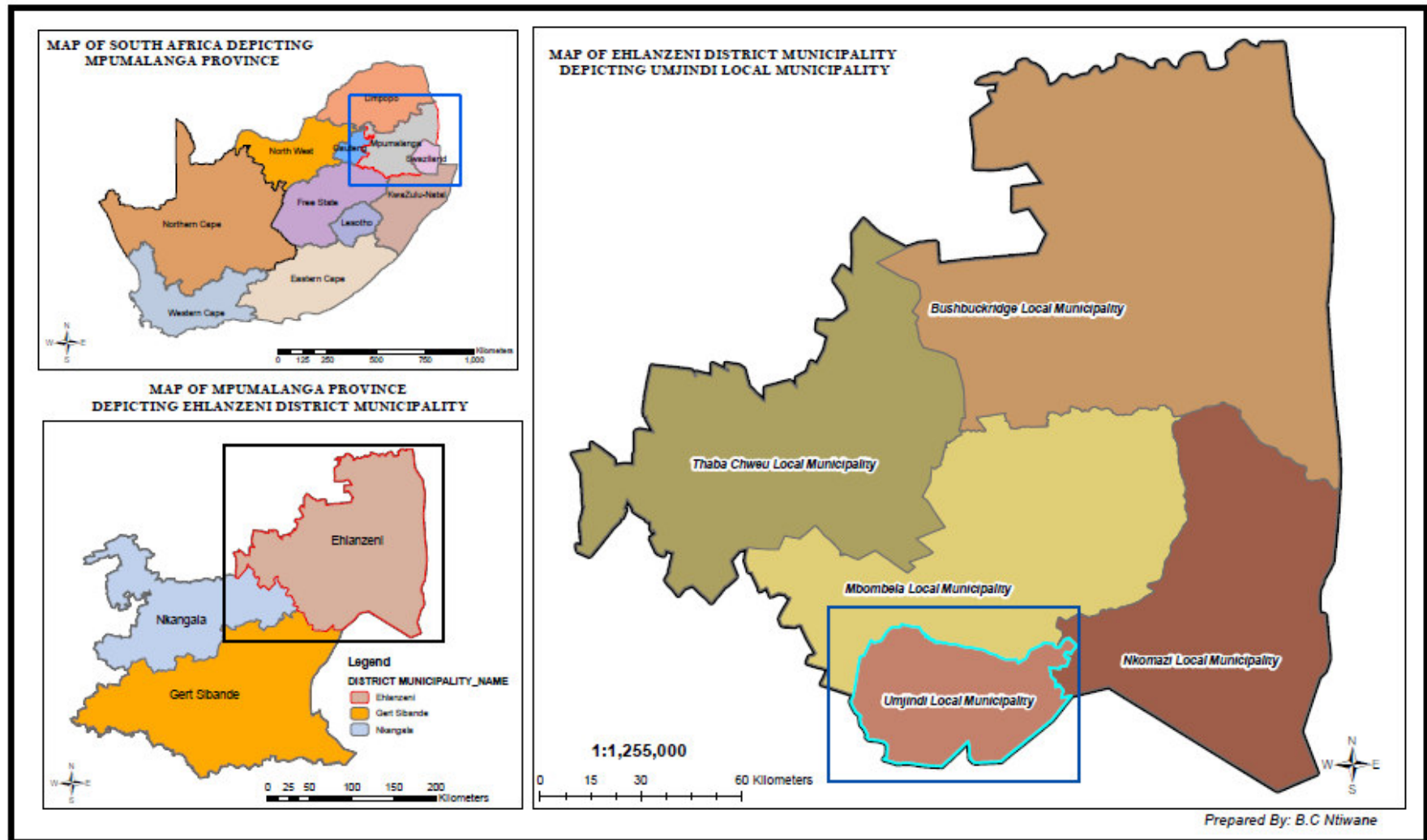
Source: Own construction, 2013

Table 2-1 tabulates the plan for the achievement of objectives through mixed research methods. The following sections further present extensive details of various methods or tools combined in each approach. The research design as a program of action (in terms of methods) for the research further provides the research setting and its contextualisation.

2.2 Research setting

The broad research setting of the study is the Umjindi Local Municipality in the Mpumalanga Province within the Ehlanzeni District Municipality. The location of the Mpumalanga Province, Ehlanzeni District Municipality and the Umjindi Local Municipality is presented in the Figure 2-1 below.

Figure 2-1: Map showing the broad setting of the study area



Source: Own construction, 2013

The focus area of the study includes all 16 extensions (Ext) of the Emjindini (Emj) Townships that consist of Phumula/Longhomes Township which are therefore case areas of the study. It is imperative for this section to present the contextualisation of the Umjindi Local Municipality as a broad setting of the study.

2.2.1 Contextualisation of the Umjindi Local Municipality

The main town of the Umjindi Local Municipality (ULM) is Barberton situated approximately 42 kilometers South East of Nelspruit. The total municipal area of Umjindi Local Municipality is estimated at 1739, 71 km², which is 12, 3 % of Ehlanzeni's total area. The town's height above sea level is 877 meters situated at Latitude: 25° 47' South, Longitude: 31° 03' East. The climate is subtropical with mild winters and warm summers and the perfect year round average day temperature of 24°C (76°F). The urban area of the municipality is divided into two areas which includes Barberton and Emjindini Townships. The municipality also has rural and semi-rural areas which are gradually developing. The Barberton area consists of approximately 12 Townships while the Emjindini area consists of 16 Townships and the Phumula/Longhomes Township.

2.2.1.1 ULM Municipal Wards

In terms of Umjindi IDP (2013-14) the municipality is divided into 9 wards as determined by the Municipal Demarcation Board. Table 2-2 presents the description of the wards in relation to the focus area (Emjindini Townships) of the study.

Table 2-2: ULM Municipal wards

Ward No.	Settlements, Villages or Urban Area
1	Dixie, Noordkaap, New Consort, Mlambongwane, Sheba Siding, KaGazi, Honeybird farm, Louwscreek, Silver Creek, Madubula, Esperado, Mashaiyane and Shiyalongubo.
2	Nkomeni, Emangozeni, Kempstone, Hhobela, Scencane, Hanging stone, Mangcukela, Trio, Glenthorpe, Dekaa, Mahewu, Stellamine, Nelshoogte, Waterfall, Montros, Emjindini Trust
3	Emj Ext 10 phase 2, Emj Ext 8, Emj Ext 13, Emj Ext 14, Emj Ext 15, Lindokuhle, Emj Ext 16, Phola Park and ka Madakwa Ndlovu, Greyville
4	Emj Ext 11, Emj Ext 12, Msholoz, Lurex Farm, St John Mission, Bhuhudla mine, Kasalkop farm, Enkanini
5	Emj Ext 9, Phumula, Long Homes, Dindela part of Ext 7 and part of Emj Ext 10
6	Emj Ext 10, 7, lower Phumula, Lower Dindela, Lower Spearville, part of longhomes and Santaview
7	New Village, Spearville, Family Units, Erf 831
8	Verulam, Fairview mine, Dikbaas and part of town and highlands
9	CBD, Industrial Area, Cathyville, Burgerville, Town Prison area; Section above Sheba road and Section below Sheba next to CBD. New Village, Highway View, New Clare and White City.

Source: Adopted and adapted from Umjindi IDP (2013-14)

In terms of the above table, the study affects areas in Wards 2-7 and Ward 9. The Table below provides the extensions and common names of the Emjindini Townships affected by the study.

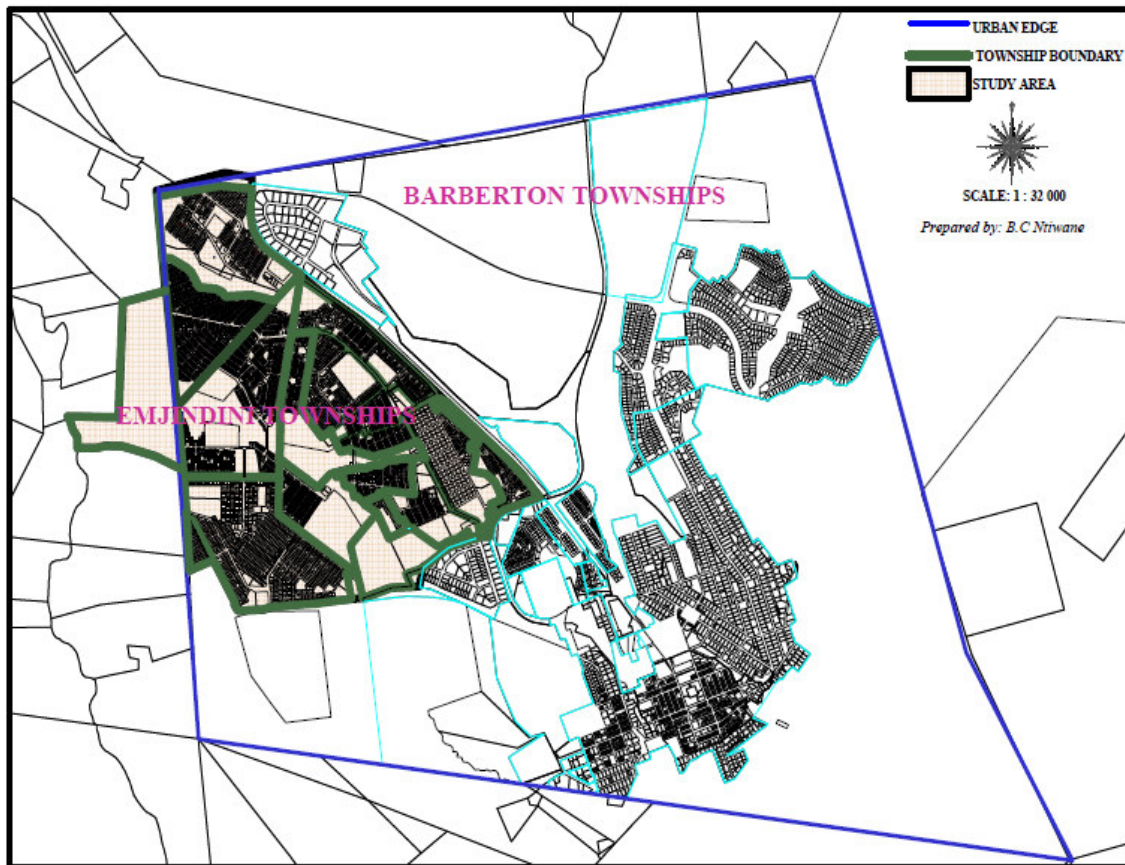
Table: 2-3: Extensions and names of study area (Emjindini Townships)

Emjindini Extension	Common Name	Ward No.	Income Level
Emjindini Extension 1	New Village, Standini, New Clare and White City.	9	Middle income
Emjindini Extension 2	Dindela	5 and 6	Middle income
Emjindini Extension 3	Spearville	6 and 7	Middle income
Emjindini Extension 4	Santaview	6	Middle income
Emjindini Extension 5	Longhomes and Phumula	6	Middle income
Emjindini Extension 6	Emjindini Extension 6	9	Middle income
Emjindini Extension 7	Emjindini Extension 7	6	Low income
Emjindini Extension 8	Greyville	3	Low income
Emjindini Extension 9	Emjindini Extension 9	5	Low and Middle
Emjindini Extension 10	Emjindini Extension 10	6	Low Income
Emjindini Extension 11	Emjindini Extension 11	4	Low Income
Emjindini Extension 12	Emjindini Extension 12	4	Low and Middle
Emjindini Extension 13	Emjindini Extension 13	3	Low income
Emjindini Extension 14	Emjindini Extension 14	3	Low income
Emjindini Extension 15	Lindokuhle	3	Low income
Emjindini Extension 16	Phola Park	3	Low income

Source: Own construction, 2013

The above areas are predominantly black populated with mostly low income group level as presented in the table. The areas identified as low income areas have a higher number of low cost housing (Reconstruction and Development Programme-RDP) houses and informal structures, in particular shacks. The information has been verified through land use survey. Figure 2-2 below graphically presents the location of the Emjindini Townships in the context of the Umjindi Local Municipality.

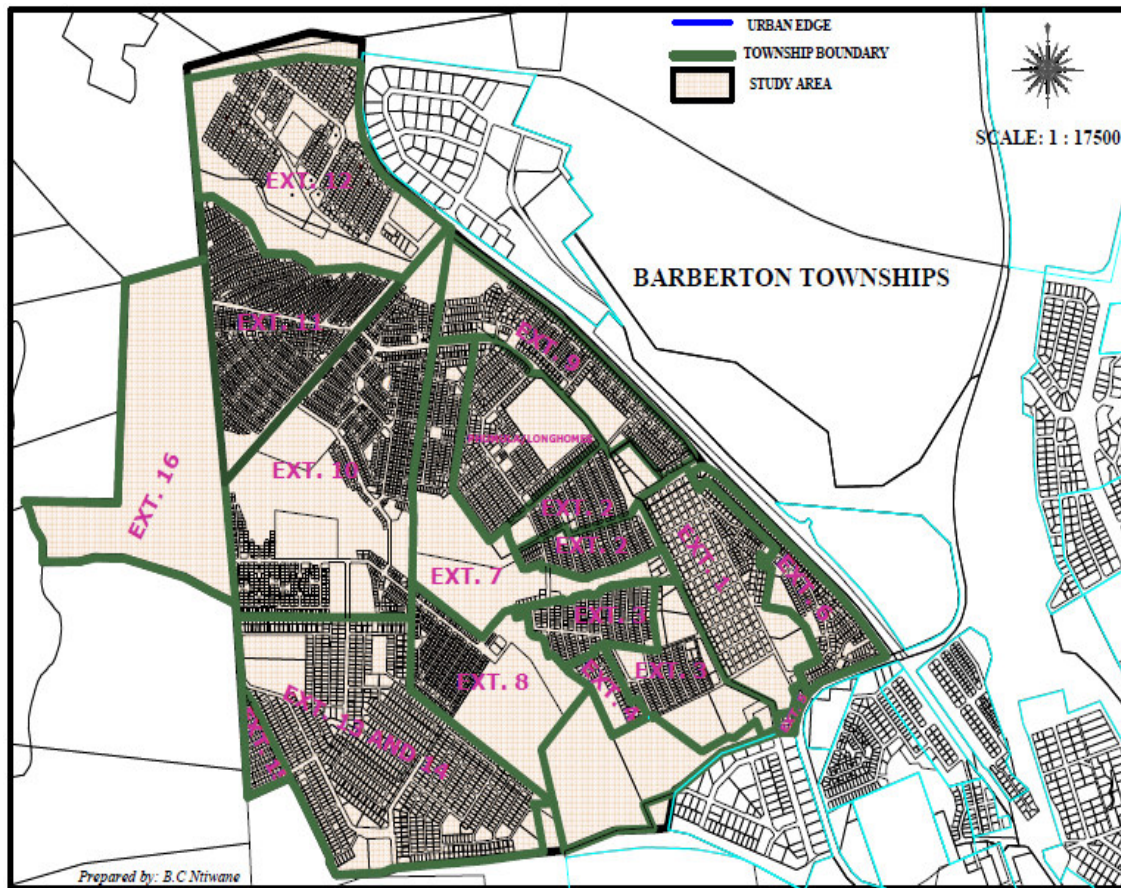
Figure 2-2: Map showing the Location of the Emjindini Townships



Source: Own construction, 2013

The demography of the municipality discussed hereunder provides the overall picture of the municipal area in terms of socioeconomic factors. The Figure 2-3 below depicts the spatial representation of the extensions within the Emjindini Townships.

Figure 2-3: Maps showing Extensions within Emjindini Townships

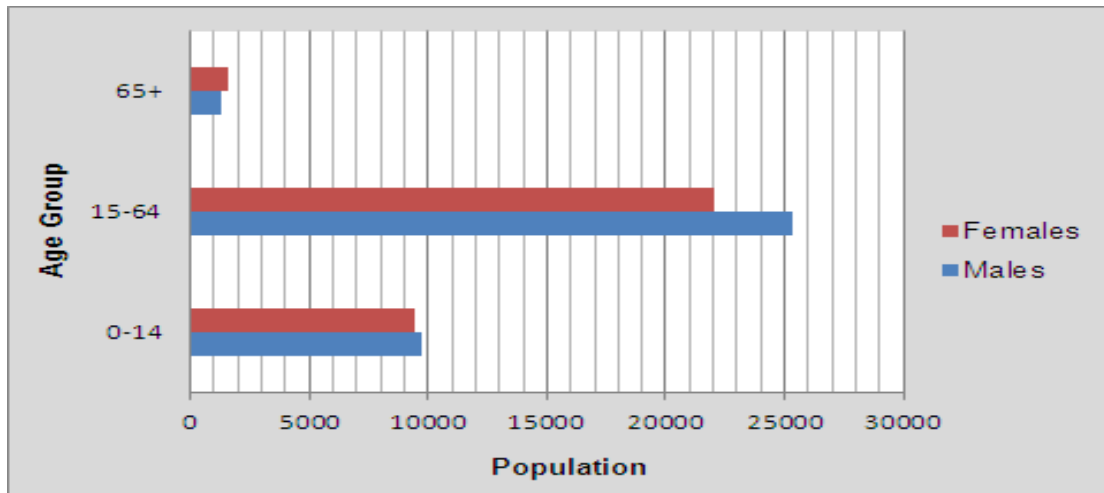


Source: Own construction, 2013

2.2.1.2 Demography

The population of the Umjindi Local Municipality is estimated at 67156 and has grown by the population of 13412 when compared to the population of 2001 which is 53744 (STATSSA, 2011). It is presented in the STATSSA (2011) results that 9.76% of the population is White while 87.03% is Black. The results further present that 1.03% of the population is Indian with Coloureds accounting for only 2%. The municipality has approximately 19 563 households with an average of 3.37 persons per household. The number of males in the municipality is higher than those of the number of females 52%:48%). Figure 2-4 provides the graphic presentation of the population by age group or female and male in terms of Census results of 2011.

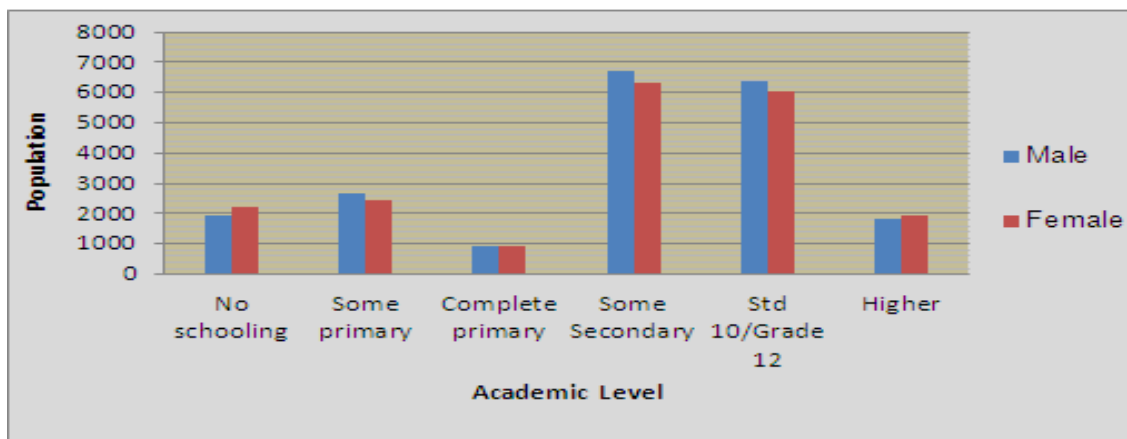
Figure 2-4: Population of ULM by Age Group or Females and Males



Source: STATSSA, 2011

The above figure shows that 70% of the population is within the age category of 15-64 while 27% accounts for the age group of 0-14 and finally, only 3% of the population represents the old class with the age of 65+. The education level of the municipality is shown in the figure below. The results present that a limited number of the population in the study area has higher education qualifications. However, the number of higher education has improved between 1996 and 2011 from 16.17% to 32.37% (Umjindi IDP, 2013-14:34). The improvement in the education level results from the introduction of the Umjindi Further Education Training (FET) facility in Barberton. It could be estimated that the soon to be established University of Mpumalanga will in future contribute to the great increase in the number of persons with higher education qualifications in the area

Figure 2-5: Education Level of ULM by Females and Males



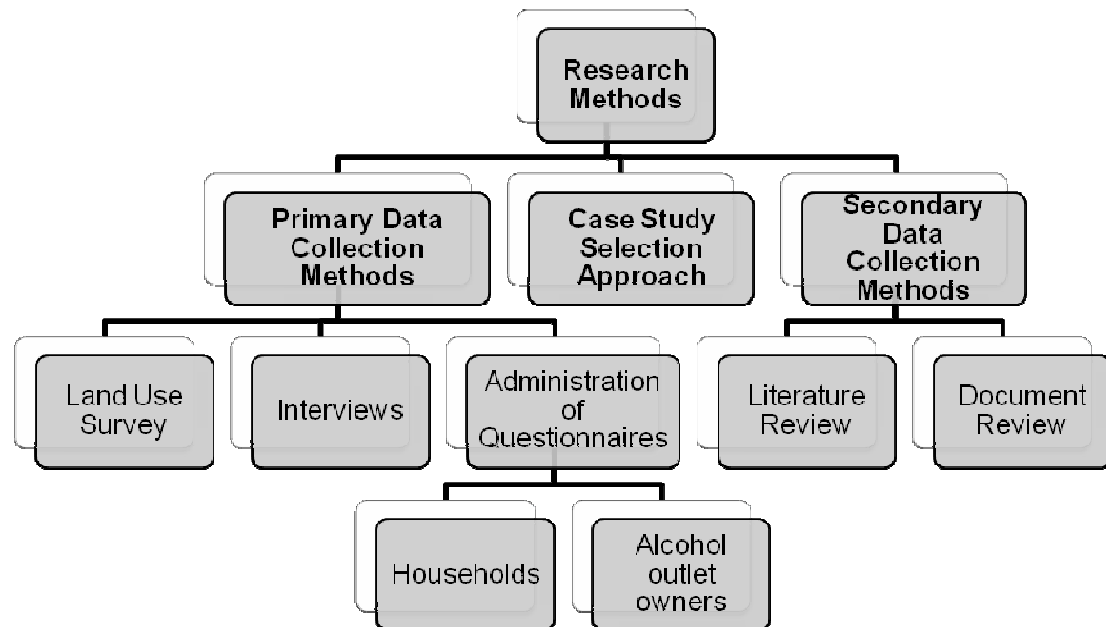
Source: STATSSA, 2011

2.2.1.3 Economic base

The municipality has an unemployment rate of 26.88% which presents an increase of 0.54% from the 26.34% of Census results of 2001 and the poverty rate of the municipality is estimated at 40% (STATSSA, 2011). The Umjindi IDP (2013-14:36) as supported by STATSSA (2011) states that 35.57% of the youth in the ULM is unemployed. The economic sectors of the municipality include agriculture, forestry mining, utilities, construction, trade, private households, community services and transportation. The number of persons receiving social grants in the municipality is distributed as follows: child support (7090), old age (3973), war veteran (2), disability (1079), foster care (530), care dependency (102) and grant-in-aids (62), (Umjindi IDP, 2013-14:37). The high unemployment rate amongst the youth could shed more light on the high number of child support on social grants.

2.3 Research Methods

This section details the qualitative and quantitative methods applied in this research on the collection of primary and secondary data. These methods include case study selection approach, land use survey, interviews, administration of questionnaires, literature review, and documentation review. Figure 2-6 below graphically presents the outline of the mentioned methods.



Source: Own construction, 2013

2.3.1 Case study selection approach

Yin (2009) and Robson (2002) argue that a case study research is an empirical investigation that explores in-depth a modern phenomenon and within its realistic context through the application of multiple sources of evidence, specifically when the margins between a phenomenon and the context are indistinguishable. The previous section of the study has presented that all 16 extensions of the Emjindini Townships in the Umjindi Local Municipality, Mpumalanga Province are the case areas of the study. The criteria that informed the selection of the case study (the Emjindini Townships) can be summed up as follows:

- a) Criteria 1: The selection of a sample within a single municipality in an urban area was considered ideal in terms of time saving, accessibility (same geographic region) and availability of research resources.
- b) Criteria 2: The selection of a sample that has a high number of discernible alcohol outlets in a residential area was considered as ideal in terms of measuring impacts and level of acceptance (compatibility).

2.3.2 Land Use survey

The land use survey is the field survey undertaken to observe and identify land use typology occurring in a specific area or property. In this study, the land use survey method has been applied for the identification of on-site consumption alcohol outlets and sensitive institutions (education and religious facilities etc.) within the case study areas. This has been undertaken to map the distribution or existing density and locality of alcohol outlets within each area of the study. In undertaking the survey, maps for each township of the study area were prepared with property descriptions for use in the field. Field workers marked all properties identified as outlets for selling alcohol in the residential area and community facilities (churches, schools, cemeteries, clinics etc.). The raw data was then mapped with notation providing a precise graphical picture of each township in relation to existing alcohol outlets. This information has enabled the researcher in the analysis of the extent of on-site consumption alcohol outlet density and proximity to sensitive institutions within the study area. The survey provided a detailed conditional assessment (status quo) of existing alcohol outlets within Emjindini Townships in terms of density and proximity to sensitive institutions.

2.3.3 Literature Review

The literature review includes national and international academic literature that relates to amenity impact of on-site consumption and off-site consumption alcohol outlets, density of alcohol outlets, land use planning, land use compatibility and regulation. The sources of the reviewed literature include the Internet and academic sources. The review responds to sub-question 2:

2. What are the debates relating to the impact of on-site consumption alcohol outlets on residential areas and land use compatibility cases of such outlets?

The academic and Internet sources provided a range of articles, books and journals that deal with amenity impacts of on-site consumption and off-site consumption alcohol outlets, density of alcohol outlets, land use planning, land use compatibility and regulation. The rationale for the review of international and national academic sources aided in the attainment of a theoretical parameter and backdrop on the debate regarding amenity effects of on-site consumption and off-site consumption alcohol outlets, density of alcohol outlets, land use planning, land use compatibility and regulation. The international academic literature dominates the available local literature related to the research topic and sub-question 2. The basic international and national literature study incorporates the following:

- a) Debates on socioeconomic impact of this phenomenon.
- b) The density of alcohol outlets
- c) Alcohol outlet density and violence
- d) Alcohol outlet density and consumption/other effects
- e) Calculation of density
- f) Regulation of alcohol outlet density
- g) Land use planning
- h) Conflicting land uses which provides insight into land use compatibility
- i) Regulations on land use

2.3.4 Documentation Review

Documentation review consists of institutional documents (clinical, programmatic, or organisational records), personal documents (diaries, letters, faxes, artistic expressions), and public historical documents (legislative testimony, policy documents, directives, government circulars, legal documents etc.) (Patton, 2002 and Ntiwane, 2012:12). The document review included the provincial and national legislation, regulations and local policy documents. The review of legal documents in particular the provincial liquor Acts provided an in-depth understanding of the legal requirements for the alcohol density incorporation, locality, application process (public participation) and operations. The review of the legal framework was conducted with the view to assessing and evaluating the extent of incorporating the mandate of the identified four variables (alcohol density, locality, application process-public participation and operations) in policy and legislation. These variables are therefore considered as key performance indicators (KPIs) for the evaluation of liquor legislation. The variables are identified in this study as the main regulatory factors that may contribute to the compatibility of on-site consumption alcohol outlets in residential areas. The explanation of the variables for the evaluation is provided in Table 2-4 below,

Table 2-4: Evaluation-Explanation of Regulatory Factors

KPI	Description	Justification
1	Alcohol outlet density	The alcohol outlet density requirements in terms of legislation e.g. 1 unit per 1000 population.
2	Alcohol outlet locality	The locality factors considered e.g. proximity to sensitive institutions (religious and education facilities, graveyard etc.) or no outlet within a 1km of a sensitive institution.
3	Application process	The participation of the general public, municipality and other stakeholders in decision making process e.g. issuing of permits or licenses for liquor. This is mainly to ascertain effects and acceptance level of proposed outlet.
4	Operations	The provision of trading days and hours including measures for preventing significant amenity effects.

Source: Own construction, 2013

The KPIs discussed above enabled the researcher to score the incorporation of mandate for the regulatory factors in liquor Acts. The score was calculated using the assessment and evaluation scale presented in the table below.

Table 2-5: Scoring Criteria for the Incorporation of Regulatory Factors

Symbol	Explanation
High	Fully incorporated
Medium	Limited incorporation
Low	No incorporation

Source: Own construction, 2013

The review allowed the researcher to respond to research sub-questions 1 and 4:

1. What is the legal mandate for providing guidelines for alcohol outlets?
4. What impact is experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures were taken to address the situation?

In this review, only the last part (the current applicable control measures) of sub-question 4 has been addressed. The reviewed legal and policy documents are cited below as follows:

- a) The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)
- b) The National Liquor Act, 2003 (Act 59 of 2003)
- c) The Eastern Cape Liquor Act, 2003 (Act 10 of 2003)
- d) The Free State Gambling and Liquor Act, 2010 (Act 6 of 2010)
- e) The North West Liquor Act, 1989 (Act 27 of 1989) as Amended
- f) The Northern Cape Liquor Act, 2008 (Act 2 of 2008) as Amended
- g) The Gauteng Liquor Act, 2003 (Act 2 of 2003) as Amended
- h) The KwaZulu-Natal Liquor Licensing Act, 2010 (Act 6 of 2010)
- i) The Mpumalanga Liquor Licensing Act, 2006 (Act 5 of 2006)
- j) The Western Cape Liquor Act, 2008 (Act 4 of 2008)
- k) The Limpopo Liquor Act, 1989 (Act 27 of 1989) as Amended
- l) The Umjindi Spatial Development Framework (SDF), 2010 and
- m) The Umjindi Town Planning Scheme (TPS), 2002

2.3.5 Interviews

Bailey (1987:174) presents the advantages of interviews as including flexibility, better response rate, opportunity to observe non-verbal behaviours, and control over environment (conducted in private) among others. Patton (2002) and Ntiwane, (2012:16) argue that interviews provide a one-to-one chance to the researcher for the exploration of interviewees' experiences and views in a phenomenon. The interviews were conducted using a combination of structured or semi-standardized questions to answer the following research sub-question:

4. What impact is experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures are applied to address it?
5. What are the preferred and practical guidelines that should be adopted to ensure that on-site consumption alcohol outlets are compatible with land uses in residential areas?

Telephonic interviews were conducted with respondents that were unavailable for a face to face interview. In certain cases after interviews, emails were circulated to role players for the provision of information that may have been missed during the interview process. The principle of non-disclosure (as part of the research ethics) of role players' identity was adopted to ensure privacy and the realisation of trustworthiness and objectivity of the information provided. The role players identified as interviewees in the study were an assortment of representatives from relevant groups: (refer to Appendix 1 for interview schedule).

- a) Town planning consultants from different provinces of the country
- b) Two officials from Mpumalanga Liquor Board
- c) One official from the South African Police Services (SAPS)
- d) One Official from Barberton Magistrate Office
- e) One official from the Umjindi Local Municipality

The selected town planning consultants were interviewed to establish their experiences on alcohol outlets amenity effects and land use control point of view. These consultants further provided possible guidelines that may be adopted to address density, locality, application process and operations of on-site consumption alcohol outlets in residential areas. The interview of officials from the Mpumalanga Liquor Board provided insight into the issues that are considered during the approval and granting of liquor licenses. The one-to-one interaction with SAPS in particular the Barberton Police Station illuminated the extent of SAPS involvement in liquor license approval process and experiences in

relation to crime within areas where alcohol outlets are located. The interview with the municipal official was mainly to ascertain the issues or factors that the municipality considers in providing comments on liquor license application. The municipality has been engaged further to provide information on formal or informal guidelines that are applied in controlling or regulating alcohol outlets (on-site and off-site) in residential areas.

2.3.6 Administration of questionnaires

Interviewer-administered questionnaires' method was used. According to Watts and Halliwell (1996: 398) interviewer-administered questionnaire method is the oldest and frequently most effective method of social survey inquiry. This method allows interaction between the interviewer and the respondents. The questionnaires administered included open ended and close-ended questions. Bailey (1987:188) states that close ended or fixed alternative questions allow the interviewer to read and mark the appropriate answers as chosen by the respondent. On the other hand, open-ended questions allow the respondent to expand on the understanding of the question by responding without any restrictions. Two sets of questionnaires were prepared and distributed. This includes questionnaires for households and alcohol outlet owners (refer to Appendix 2 and 3 of the report). All identified owners of the alcohol outlets existing in the sample areas were interviewed and a total of 96 questionnaires were administered. The table below provides the distribution of the questionnaires to households. It is apparent from the table that a total number of 300 questionnaires were proportionally distributed with 100% of questionnaires returned.

Table 2-6: Distribution of questionnaires to households

Extensions in the Study area	Total number of households (approximate)	NQD	%	NQR	%
Emjindini Extension 1	364	15	100	15	100
Emjindini Extension 2	427	17	100	17	100
Emjindini Extension 3	489	19	100	19	100
Emjindini Extension 4	60	2	100	2	100
Emjindini Extension 5	17	1	100	1	100
Emjindini Extension 6	283	11	100	11	100
Emjindini Extension 7	260	10	100	10	100
Emjindini Extension 8	382	15	100	15	100
Emjindini Extension 9	461	18	100	18	100
Emjindini Extension 10	898	36	100	36	100
Emjindini Extension 11	1274	51	100	51	100
Emjindini Extension 12	590	24	100	24	100
Emjindini Extension 13 and 14	1014	41	100	41	100
Emjindini Extension 15	118	5	100	5	100
Emjindini Extension 16	476	19	100	19	100
Phumula/Longhomes	422	16	100	16	100
Total	7535	300	100	300	100

Source: Own construction, 2013

Key: **NQD** = Number of questionnaires distributed
 NQR = Number of questionnaires returned

The distribution was based on a 4 percentage (300) of the approximately 7535 households calculated through mapping of residential properties of study case areas (extensions of Emjindini Townships). The estimated number of households excludes the estimation of back yard, backroom or outbuilding dwellers in all extensions and the new informal settlement known as “Msholozza”. The total number of 7535 households if multiplied by 3.37 of persons density per household in terms of Census 2011, results to the total population of 25392 for the sampled area. The 4 percentage is therefore the sample of households used for the collection and analysis of the raw data. In literature, sampling is discussed as the answer to the difficulty of not being able to examine every possible piece of evidence (Watts and Halliwell, 1996, 88).

In administering the proportional distribution of the 4 percentages of questionnaires to the households, a random sampling approach has been adopted. The random sampling approach has given all members of the population (households) the same chance of being selected or left out in the survey.

2.4 Analysis, interpretation and presentation of data

Existing literature defines research analysis as the process where the researcher applies a range of statistical and mathematical techniques in the synthesis of specific variable in the data set (Mouton, 1996:161). The author further explains the interpretation of data as the process where the researcher tries to bring it all together either by relating various individual findings on the study variables to an existing theory or hypothesis or by formulating a new hypothesis that provides a better explanation for the data. Therefore, the research has adopted various statistical and mathematical techniques for the analysis of quantitative data. The presentation of the data incorporates the use of graphs and tables. Cross-tabulation is applied in the study to present, analyse and interpret the interrelations of variables in the data set with cases areas.

The study has identified a number of variables to measure the level of acceptance of on-site consumption alcohol outlets by respondents in residential areas. The broad variables identified include criminal activities, social and moral problems, noise and air pollution, cleanliness of outlets location, location of facilities next to community facilities, accessibility, police visibility, social cohesion, damage on infrastructure and economic factors. Each of these broad variables has sub-variables that are clearly presented in Appendix 2 of the report. The frequency and percentages of responses on variables are presented against case study areas defined in terms of extension e.g. Emjindini Extension 1 Township. The table below provides an example of the presentation of frequent/percentage distribution of household's impacts level of acceptance on criminal activities applied in Chapter 5 of the research. The impact acceptance level has been assessed for daytime and nighttime periods respectively.

Table 2-7: Example: Impact level of acceptance on criminal activities in Emj Ext 11

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	0	0	5	10	46	90
Burglary	0	0	30	59	4	8	6	11	11	22
Assault	0	0	0	0	0	0	1	2	50	58
Hijack	0	0	0	0	0	0	0	0	0	0
Robbery	0	0	0	0	4	8	0	0	47	92

Source: Own construction, 2013

The symbol “F” in the table represents “frequency” and the symbol “%” represents “percentage”. The above analysis technique has allowed the researcher to present the variance and relationship of variables and the existing of on-site consumption alcohol outlets in residential areas. In certain instances the “mean” is also calculated for presenting the degree of variance and relationship. The mean has been calculated by adding the total number of responses (frequency) and dividing by the total number of respondents. The cross tabulation by case study, density of outlets vs. variables enabled the researcher to relate the findings to the hypothesis of the study. In line with the research theory of utilitarian perspective, the high number received on the total calculation of “acceptable/highly acceptable level” on variables is interpreted as the compatibility level of the alcohol outlet within a residential area. The qualitative data in particular legislative documents is analysed, interpreted and presented in terms of Table 2-4 and Table 2-5 presented above.

2.4.1 Limitation of the study

The study is “limited” to the critical investigation of the impact of on-site consumption alcohol outlets on land use compatibility with residential areas in the Umjindi Local Municipality with the exclusion of other municipalities of the Ehlanzeni District. The study is further limited to a cross sectional analysis and excludes the consideration of the following issues:

- The longitudinal analysis of the impacts of on-site consumption alcohol outlets on land use compatibility in residential areas.
- Cross sectional analysis of amenity effects of the density of on-site consumption alcohol outlets on the youth in particular secondary and tertiary learners or students.

- c) The cross analysis of the impact of on-site consumption alcohol outlets on land use compatibility in residential areas of the rural set-up and Barberton Townships of the Umjindi Local Municipality.
- d) The analysis of the history of on-site consumption alcohol outlets providing information on the date of establishment and date of establishment of sensitive institutions (schools, churches, etc.) in the proximity where the outlets exist.

The further limitation to the study includes the difficulties in the ascertainment of the records of liquor license approvals from the Mpumalanga Liquor Board (MLB), in particular in terms of years in which licenses were granted and specific areas per magisterial district. The above limitations, however, did not in any way reduce the value or lessen the credibility of the study as the districts excluded for example, share similar attributes to the study area and findings can be easily generalised; the other limitations provide room for further study but the effects of the phenomenon in this area can also be generalised to these factors, and the long-awaited tertiary institutions to be created in the area may influence the findings of the next study.

2.5 Summary of research methods

The chapter presented the methods that are applied in the execution of the research in particular the attainment of research objectives and in responding to research sub-questions. The research is construed herein as an applied research which is descriptive though it incorporates elements of pure research. The chapter articulated the research setting as including all 16 extensions of Emjindini Townships including Phumula/Longhomes Townships (blacks dominated) located in the Umjindi Local Municipality (ULM) which falls under the jurisdiction area of the Ehlanzeni District Municipality (EDM) in the Mpumalanga Province. The ULM is discussed as having an estimated population of 67156 with an unemployment rate of 26.88%. The research design of the project is explained as incorporating a mixed research approach which combines qualitative and quantitative research methods. The chapter identified and discussed primary data collection methods that include land use survey, interviews and administration of questionnaires and secondary data collection methods that include literature review and document review. These methods enabled the researcher to confirm the validity of the research hypothesis. The criteria for the selection of case areas are presented in the chapter. Furthermore, random sampling is explained as the sampling approach adopted for the distribution of households questionnaires. The chapter provides that the study had 100 percent return of questionnaires distributed to households (300) and alcohol outlet owners (96).

The analysis, interpretation and discussion of data is presented as applied through the use of tables and graphs providing the variance and relationships between variables and cases areas. Finally, the chapter summarised the limitations of the research in regard to data collection and extent of the study.

3. CHAPTER 3: LITERATURE REVIEW

The chapter aims to respond to the research sub-question 2 in Section 1.4 of the report. The research sub-question to be addressed by the chapter is shown below.

2. What are the debates related to the impacts of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets?

The chapter presents the debate on the socioeconomic impact, alcohol outlet density and land use planning which includes the discussion of conflicting land uses and the regulation of land use.

3.1 Socioeconomic impact

The concept ‘socioeconomic impact’ relates to both social and economic bearing and influence that derive from an activity, project, programme or implemented policies. In the context of this study, the socioeconomic impact is impact that is experienced by the community as a result of the existence of alcohol outlets (in particular on-site consumption alcohol outlets) in their neighbourhood. Vanclay (1995:132) defines social impact as the literal negative or positive actual experience of individuals or communities that include social and cultural (beliefs, norms, perceptions and values) effects to humans of any action that influence the manner in which the people relates to each other, play, work, meet their basic needs and integrates as a society. On the other hand, the economic impact is the effect of an event, activity, policy or action that influences market, employment, infrastructure, competition, property values, consumer confidence, consumer demand and monetary levies, to name a few. Therefore, socioeconomic impact affects individuals, institutions and communities (Finsterbusch, 1980:23). It is argued by Vanclay (2002:191) that the socioeconomic impact is generally misunderstood with socioeconomic change processes which are not impact but, rather, change processes that lead to impact. Further thereto, Vanclay (2002:193) provides examples of socioeconomic change processes which can be paraphrased as follows:

- a) Demographic change processes (changes experienced in in-migration, out-migration, presence of newcomers, mortality and fertility, presence of seasonal residents, rural to urban migration presence of tourist and day-trippers, etc.).
- b) Geographic change processes (densification and mixed land uses, urbanisation, gentrification, urban sprawl, enhanced transportation infrastructure, etc.)

- c) Economic change processes (concentration of economic activity, currency exchange fluctuation, inflation, impoverishment, conversion and densification of economic activities, concentration of economic activities, etc.)
- d) Sociocultural change processes (social disorganisation, segregation, cultural differentiation, social globalisation, etc.)
- e) Legal and institutional change processes (changes and introduction of policies, decentralisation, privatisation, institutional globalisation and centralisation, etc.)
- f) Emancipation and empowerment change processes (capacity and skills building, marginalisation and exclusion, democratisation, etc.)

It can thus be said, for instance, that, the densification of alcohol outlets is a change process which leads to specific socioeconomic impact that may include crime, noise, odour, employment, competition, alcohol related harms and others. It is the argument of Vanclay (2002:185-186) and Vanclay (2003:8) that any change in the following factors deriving from any action or event constitutes social impact:

- a) The way of life for people (social organisation, how people live, work, play and relate to one other on a daily basis).
- b) The culture of people (their shared beliefs, norms, customs, values, perception, and language or dialect).
- c) Community structure (social cohesion, stability, land uses, character, infrastructure such as services and facilities).
- d) Political systems in a neighbourhood (the extent of public participation in decisions that affect the lives and character of community, the level of democratisation that is taking place, and the resources made available for this purpose).
- e) Environment and its features (the air and water quality people use; the adequacy and quality of available food, the risk or hazard, dust and noise level people are exposed to, the adequacy of services (sanitation, electricity, etc.), physical safety and accessibility to and control over resources including transportation infrastructure).
- f) Health and wellbeing of community (health in terms of complete physical, psychological, social and spiritual well-being and not only the absence of morbidity).
- g) Personal and property rights of individuals (particularly whether individuals are economically affected, or experience the violation of civil rights).
- h) Fears and needs of individuals (perceptions about their security and safety, their fears about the future of their community, and their needs for their future and the future of their generation).

Du Pisani and Sandham (2006:708) argue that the assessment of social impact in certain cases is more crucial than the assessment of environmental and economic impact of developments. The introduction of a land use in an area should directly and indirectly provide significant benefits to the community. However, land use that results to environmental and economic benefits to the detriment of social benefits or the other way round is therefore unacceptable. There must always be a way to balance the triple bottom line (Vancly, 2004:265) of social, environmental and economic performance of a land use in a neighbourhood. The scourge of negative socioeconomic impact of a land use must be thoroughly investigated in order to introduce control measures. For instance, if the significance of unacceptable impact caused by on-site consumption alcohol outlets results from density, density regulations must be investigated, formulated and enforced. The practical example of social impact of on-site consumption alcohol outlets in residential areas resulting from musical instruments and traffic related factors is noise effects. Noise is considered as an unwanted negative social impact that has psychological (interrupts relaxation, sleep and rest etc.), health (migraine headaches, higher heart and respiratory rates, increased blood pressure, contributes to hearing loss, etc.) and economic impact (lowers the market value of property) in a neighbourhood (Finsterbusch, 1980:195-213). Noise effects of on-site consumption alcohol outlets may be generally associated with the density of existing outlets in the neighbourhood.

3.2 The density of Alcohol outlets

Density as a concept is simply defined in the spatial context as the number of units or items in a given area (Boyko and Cooper, 2011:5). The authors argue that the precise definition is dependent on the type of density which is being conceptualised. In defining alcohol outlets density Campbell *et al.* (2009:556) and Cameron *et al.* (2012:IV) present it as the total number of physical locations of alcohol outlets either per unit of area or per unit of population. Generally, alcohol outlets are settings where alcohol is consumed either at on-site consumption and off-site consumption establishments (Campbell *et al.*, 2009:556 and Mackinnon *et al.*, 1995:592). The density of alcohol outlets has a significant positive correlation to the much social harm and other alcohol related problems (Livingston, 2008; Campbell *et al.*, 2009; Mackinnon *et al.*, 1995; Teh, 2007; Livingston, 2011; and Livingston *et al.*, 2011). The effects of alcohol outlets density have been conceptualised as incorporating two variables that include proximity (convenience to access alcohol) and amenity (negative consequences) effects (Livingston *et al.*, 2007:561). The author presents that these two variables of alcohol outlets density provide discrete implications for the correlations of outlets density with alcohol-related harms. The related alcohol problems and harms associated with alcohol outlets density include violence and assault (Livingston, 2008:619; Livingston, 2011: 517; Gruenewald *et al.*, 2006: 674; and Pridemore and Gruber, 2012:386), property crime (Teh, 2007:4), alcohol related

arrest and drink-driving (Huckle, *et al.*, 2008:1615), fatal and severe alcohol traffic crashes (Campbell *et al.*, 2009: 557 and Franklin II *et al.*, 2010:284), to name a few. The availability theory is relevant in relation to the proximity and amenity effects of alcohol outlets density. There is overwhelming evidence of alcohol outlet density harms and related problems emanating from two sources that include cross-sectional studies (relationship of outlets and harms), longitudinal studies (changes/trends of outlets and consumption or problems) undertaken globally (Livingston *et al.*, 2007:561 and Stockwell & Groenewald, 2004:222). This posits that the high number of alcohol outlets (on-site consumption and off-site consumption) in a given area results to different implications of harms. On the contrary, other than harm, Livingston *et al.* (2007: 561) and Cameron *et al.* (2012:3) present that the high density of alcohol outlets increases competition pressure on other outlets and reduces the monetary price as well as non-monetary cost (e.g. travel time) associated with purchasing alcohol, consequently, the increased level of consumption is experienced.

3.2.1 Alcohol outlet density and violence

The significant positive correlation between the density of alcohol outlets (on/off premises) and violent crime was revealed in the study undertaken in Washington DC (Franklin II *et al.*, 2010:284). On the other hand, the study undertaken in Melbourne, Australia revealed that on-site consumption outlets are positively associated with the substantial proportion of recorded alcohol related assault rate (Livingston, 2008: 625 and Livingston, 2011:220). Gruenewald (2011: 251) succinctly presented an empirical generalisation stating that the higher densities of any type of on-site consumption outlets including bars and taverns are directly associated to assaultive violence. Furthermore, Livingston, (2008:625), Livingston (2011:219) and Campbell *et al.* (2009:560) state that the increase in the number of outlets in an area contributes greatly in the resulting rates of assault. Gruber and Pridemore (2011:8) also indicate that assaultive violence in Cincinnati is frequent near areas of concentration for alcohol outlets. However, findings of another study undertaken in Cincinnati, Ohio indicate that the significant positive association of alcohol outlets and violence is dependent on the land use pattern of the area (Pridemore and Gruber, 2012:392). This implies that a neighbourhood with high maximum density type of developments where there is a high concentration of low cost housing has a prevalence of alcohol outlet density and related violence. This is supported by the argument that alcohol outlet density and violence are disproportionately agglomerated in neighbourhoods dominated by poor minorities who are the subjects of abject poverty (Franklin II *et al.*, 2010:284). Schwester (2010:378) states that on-site consumption alcohol outlets densities are indicators of violent crime in conjunction with the socio-demographic variables such as poverty and social disorganization including land use patterns (Pridemore and Gruber, 2012:392) better explain

violent crime rates. Moreover, neighbourhoods with higher spatial density of alcohol outlets appear to be more prone to clusters of assaultive violence when compared to agglomerations with a lower density of alcohol outlets (Grubestic and Pridemore, 2011:10). It is also the argument of Gruenewald *et al.* (2006: 673) and Livingston (2011:519) that assault rates are greater in areas with extreme poverty, increased socioeconomic disadvantages and residential instability where there is a disproportionate concentration of on-site consumption alcohol outlets (e.g. bars, tavern). Nevertheless, violence is mostly experienced on weekends and weekend night excluding weeknights (Monday to Thursday) in on-site consumption alcohol outlets while violence is prevalent during weekdays at off-site consumption alcohol outlets (Bieler and Roman, 2013:2)

3.2.2 Alcohol outlet density and consumption/other effects

According to Huckle *et al.* (2008:1615) the study undertaken in eight US universities discovered a significant positive relationship between alcohol outlet density and heavier drinking among students. In the study of college students, Weitzman *et al.* (2003) in Schonlau *et al.* (2008:92) found a significant correlation between alcohol outlet density and drinking-related problems and binge drinking behaviour. Furthermore, the study undertaken in New Zealand revealed that alcohol outlet density was associated with a higher alcohol consumption rate for young people (Huckle, *et al.*, 2008: 1618 and Cameron *et al.*, 2012:3). This shows that the higher number of alcohol outlets per area has a significant contribution to the high level of consumption. Livingston (2010:140) indicates that the high level of consumption as a consequence of outlet density contribute to the increased rate of domestic violence. The author further states that intimate partner violence (IPV) is found in other studies as positively related to the density of on-site consumption alcohol outlets. Moreover in certain areas, the high rate of hospital admissions is related to outlet density. This is supported by the study undertaken in the United State where it was found that an increase in one alcohol outlet per 10 000 population contributed to 0.48 increase of hospital admissions as a result of alcohol morbidity (Tatlow *et al.*, 2000:87). Furthermore, the density of alcohol outlets is related to amenity problems that include fear and safety, property damage, litter, public disorder, vandalism, indecency and public drunkenness (Wilkinson and Livingston 2012:394). The existence of alcohol outlets in neighbourhoods does not only result to amenity effects but, rather, to detrimental socioeconomic effects for families of alcohol consumers including patent health threatening situations to the consumers (Graham, 2005:46).

3.2.3 Calculation of density

It is the contention of Boyko and Cooper (2011:9) that in the calculation of density the process must incorporate the hard (e.g. statistical calculus) and soft (spatial setup, socio-economic impact including needs, behaviors and perceptions of people) dimension of density. The authors have also posited the comparison of a number of densities in other areas of similar scale (e.g. countries, cities, towns and villages). The density for alcohol outlets is either determined in terms of the population or area (Cameron *et al.*, 2012: IV). For instance, a neighbourhood with a significant proportion of population will have a higher number of alcohol outlets as compared to an area with the insignificant proportion of population. Currently, no international standard guidelines or performance standards are available for the density of alcohol outlets (either on/off-site consumption premises). Evidence exists though, to the fact that different countries, cities and local authorities have different density policies or guidelines for alcohol outlets. Moreover, not all countries, cities and local authorities have alcohol outlets density policies. In South Africa only limited local authorities have guidelines for alcohol outlet density, and the Umjindi Local Municipality as a broad setting of the study has no policy. In Sao Paulo suburb in Brazil, the density of alcohol outlets is estimated at 1 outlet for every 16 people (Dualibi *et al.*, 2007:2276), in Glasgow there is 1 outlet for every 85 people (Ellaway *et al.*, 2010:8) and in New Jersey license restriction on density is that there should be 1 license for every 3000 residents (Schwester, 2010:378). The varying densities are a cause for concern requiring the adoption and implementation of policies and density guidelines for alcohol outlets. The provision of distance parameters that can be allowed between alcohol outlets (as land uses) will reduce the impact of noise to other land uses in a considerable way (Horack, 1972:76).

3.2.4 Regulation of alcohol outlet density

Chen *et al.* (2010: 270) indicate that the restrictive measure for limiting the available number of alcohol outlets in a neighbourhood is a community advocated approach. The formulation of density restrictions has to incorporate regulations of all existing alcohol typologies (on-site consumption and off-site consumption premises) as set out in existing laws. Gruenewald (2011:50) states that the density regulation of on-site consumption alcohol outlets premises (consumed on the premises) are distinct to the one applicable to off-site consumption alcohol outlets premises (not consumed on the premises). The author further argues that stringent regulations are applied in on-site consumption alcohol outlets due to their great effects of health risks.

Huckle, *et al.* (2008:1618) and Campbell *et al.* (2009:556) state that the introduction and enforcement of density restrictions for alcohol outlets would be an affordable effective approach to reduce heavier alcohol consumption and alcohol-related harm related to the clustering of outlets. Conversely, the adoption and application of restrictions reducing the number of outlets in a given area are likely to attract great commercial and fiscal effects and may be challenged by alcohol manufactures and distributors (Campbell *et al.*, 2009:566). It is the argument of Campbell *et al.* (2009:556) that alcohol outlet density may be regulated at the local level through licensing and zoning regulations including restrictions on the use and development of land. The author states that the licensing and zoning restrictions may vigorously contribute to the reductions of mobility problems (traffic problems), noise pollution, public nuisance, vandalism, gangsterism, loitering and prostitution. In addition, the local zoning and planning tools such as laws, by-laws, land use policies and other regulatory frameworks may effectively ameliorate the control of alcohol availability (Mackinnon *et al.*, 1995: 592). It is the assertion of Laranjeira and Hinkly (2002:456) that international studies on alcohol outlet density resulted to policy implications which conclude that any alcohol outlets density regulation could effectively contribute to the reduction of alcohol-related harms. The spatial planning and land use instruments such as the spatial development frameworks and land use management schemes of local authorities are therefore tools for the incorporation of density directives.

3.3 Land use and planning

This section discusses land use and planning in the context of land use planning, conflicting land uses and the regulation of land uses. This section presents the importance of land use planning in the promotion of compatible land uses.

3.3.1 Land use planning

The provenance of land use planning lies in the late nineteenth and early twentieth century of the American planning respectively (Feiock, 2004:363 & Akimoto, 2009:463). Planning as a concept in the context of spatial planning is defined as a process of ensuring proper use of land by the protection and enhancement of the socioeconomic aspects of life and biophysical features of the environment (Millette, 2011:21). An activity carried out or exercised by humans on land temporarily or permanently is land use. Therefore, land use is a product of human choice and decision in the context of political, legal and socioeconomic framework (Mather, 1986:26). Land use planning can thus be defined as a process which includes the classification of land on the basis of features of life (physical, economic and social) and as a process of identifying the copacetic optimal, efficient and effective use

of land (Akimoto, 2009:466). On the other hand, Van Wyk (2007:59) considers it as consisting of two discrete independent dimensions namely, strategic future planning (spatial comprehensive planning or integrated development planning) and land use or development control (land use management through land use policies and laws). Land use normally, in general, is largely or entirely affected by a number of changes over a given period which is influenced by a number of driving forces. The driving forces for land use change that have been identified in literature include the following (Hesperger and Burgi, 2007; Verburg *et al.*, 2004; Diogo and Koomen, 2010 & Diogo and Koomen, 2012):

- a) Natural capital driving forces, for example, opportunities and constraints of air (atmospheric properties and climatological processes), water (hydrological processes and drainage), land (bedrock characteristics and geological processes including soil characteristics) and habitats (vegetation characteristics, biodiversity significance, conservation value and life-community properties) (Ekins, 2011:633).
- b) Socio-cultural driving forces, for example, including social structure, demographic shifts (birth, death, immigration, and other related forms of demographic changes), lifestyle (individuals or groups), heritage and historical significance;
- c) Economic driving forces, for example, comprising of market structure (opportunities and failures), existing accessibility to infrastructure (transportation and engineering services) and consumer demands (job opportunities, goods and services);
- d) Political driving forces, specifically laws and policies with a spatial orientation related to for example, restrictions, nature conservation and infrastructure development;
- e) Technological driving forces, for example, institutional and social expertise, improved technological advances.

The above is supported by the statement that land uses are determined by social, natural, economic, cultural, institutional, political and legal factors (Jansen, 2005:2). In line with the driving forces, the increase in the use of land for alcohol outlets is therefore related to the socioeconomic driving forces of land use change. It can be argued that poverty and social deprivation result in the increase of second economy activities or land uses (spaza shops, taverns, street markets etc.) as sources of income. These land uses (second economy) when incorporated in a settlement land use structure either formally or informally contributes to a “mixed land use”. The “mixed land use” conception promotes a non-separatist approach by incorporating complementary activities, including housing, sustainable and commercial land uses under a single umbrella (LagendiIjk, 2001:144). Laitos and Abel (2011:493) argue that resource unsustainability and disintegration in socioeconomic classes is the consequence of the segregation of land uses.

The failure to integrate land use leads to inefficient and ineffective use of land. It is indicated by Lagendijk (2001:145) that the mixing of spatial functions (mixing of land uses) provides both spatial quality (increase in property value and improve spatial character) and spatial quantity (efficient and effective use of scarce resource-land) benefits in the environment. Mixed land uses further promotes neighbourhood liveliness and safety in particular at night and reduces travel distances to services and spatial functions (Marshall, 2000:65). However, mixed land use does not provide benefits if the combination of land uses is in conflict with each other. This is mainly the consequence of poor planning where land use distribution is not considered on the basis of compatibility with other land uses. The rationale for the combination of land uses is that (Davis, 1976:24-25):

- a) land may be used for more than one use,
- b) there is existence of competition for different land uses and,
- c) Different land uses are compatible with other land uses and sometimes simultaneously coexist in an area.

Land use planning as an integrative process aids in promoting the sustainable use of land and reducing conflict that may be evident amongst land use activities. The successful land use planning process is through the availability of accurate land use data amassed through land use surveys (Chopra, 2012:925). This suggests that land use planning can never be successfully realised without the understanding of the environment and needs of the people to which the planning relates.

3.3.2 Conflicting land uses

Conflicting land uses sometimes include locally unwanted land uses (LULUs). LULUs are land uses that result to the negative externalities which offend other land uses as the results of noise, noxious gases, increased traffic, increased crime activities and other related problems (Popper, 1985:8). This implies that the land use that has negative effects on surrounding land uses is either incompatible or in conflict with other land uses. Agbeja and Derkyi (2011:462) state that conflict is a pervasive process in human and land use conflict will never be wholly eliminated, it can only be minimised. The authors further argue that the achievement of land use compatibility is dependent on consensus between land uses. It is the contention of Chopra (2012:924) that the inopportune use of land parcels results to social problems e.g. poverty, crime, and the deterioration and inefficient exploitation of the biophysical features (natural capital) of the environment. The quality of life in residential neighbourhoods is largely influenced by the manner in which land is used (Pătroescu *et al.*, 2011:178). It is consequently worth noting that land use incompatibility is influenced by the negative

effects (e.g. mobility and amenity) which are direct conflicts that are brought by a land use to other land uses. In addition, Haberl *et al.* (2004:7) states that the appropriate use of land can result to the monolithic benefits of the natural landscape by improving the value of aesthetic, ecological and economic aspects of life. The previous section presented the density of alcohol outlets in residential neighbourhoods as having a significant positive correlation with crime and other alcohol related harms. It is thus necessary to state that, in this instance, the problem may not be the land use (alcohol outlet) but, rather, the problem of not regulating the distribution (density) of the land use (alcohol outlet) within a given area. Consequently, the land use contributes to cumulative socioeconomic problems thereby conflicting with other land uses. This leads directly to the fact that the conflict of land uses is not primarily the issue of compatibility with land use regulation. It is an overt reference that there are land uses that can never be consistent with one another which include residential and heavy industries (sawmills, nuclear power plants, mines etc.).

The conflict between these land uses (residential and heavy industry) can never be minimised due to the significance of health risks proportion involved therefore, the conflict should be eliminated (physical separation) through regulation. The question that one can ask is whether the density of a single land use in an area constitutes a conflict or competition. It may be argued that certain land uses have externalities in terms of traffic (amongst others) which are cumulative if densified. Mendelker (1972:19) states that the proximity (closeness of similar land uses) and demand (sufficient provision of uses) question on land uses should be considered prior to permitting land use. In the case of alcohol outlets, in order to reduce their resulting conflict with other land uses the proximity and demand factor becomes relevant. Subsequently, this will elevate conformity and harmony of land uses within a specific neighbourhood (Mendelker, 1972:20). On the other hand, Horack (1972:74) argues that the direct and indirect consequences of a land use on adjacent land use, community facilities and government services are a requisite for defining compatibility. Horack (1972:74) cites that the development of performance standards in land use regulation may reduce land use mismatches and conflicts including legal uncertainties. In contrast, performance standards provide guidelines for the compatibility of a land use (e.g. industrial) with other land uses (e.g. in residential areas). The performance standards for measuring land use incompatibility in a residential area are informed by the following factors paraphrased from Norton (1972:92):

- a) Threat to individuals or infrastructure including property: e.g. explosion, hazard corrosive fumes, vandalism, property damage, traffic congestion.
- b) Threat to human health, convenience and comfort; e.g. disproportionate odour, dust, smoke, noise (deriving from musical instruments, traffic etc.), vibration, industrial waste, garbage, glare at night and overcrowding of people.

- c) Threat to ethics, values and morals: e.g. entertainment districts such as places for consumption of alcohol beverages, gambling and amusements.
- d) Threat to other miscellaneous factors: e.g. psychological and physical deterioration of a neighbourhood as a result of intensification of land uses with extreme effects, prevalence strangers, increased fear amongst residents, increased vehicular traffic resulting to mobility issues, vandalism, gangsterism etc.

These factors in line with the utilitarian perspectives posit that if a land use proposed in a residential area does not provide an acceptable pleasant level, such land use is incompatible with other existing land uses. Therefore, factors that include proximity, demand and amenity effects of a land use collectively may virtually or entirely define the compatibility of a land use. Norton (1972:93-99) highlights that the compatibility of land uses can be achieved through the implementation of programs that include zoning, abatement of nuisance, eminent domain (physical removal) and special consent permits. In view of the proposition by Norton (1972) it can be suggested that the compatibility of a land use with other land uses can only be achieved through land use regulation.

3.3.3 Regulation of land use

The foundation of land use regulations such as zoning and other land use controls is the nineteenth century during the industrialisation era (Wilson *et al.*, 2008:211). The justification for the regulation of land uses include factors such as land is a scarce resource (promotion of efficient use), ethical (daunt the misuse and abuse of land use rights) and environmental (protection of biophysical features) considerations, planning needs and government responsibility to promote public good (Sifuna, 2009:44-47). Land use decisions, regulations and policies are considered primarily as a concern and a function of local authorities (Feiock, 2004:365, Wu and Cho, 2007:70 & Sudonienè and Matonienè, 2009:155). In this regard, in order for local government to promote spatial justice, municipalities should adopt plans that earmark areas for development and applicable densities (Mandelker, 1999:827). In this context, officials in local government believe that in order to secure a successive future of a municipality, land use regulations (zoning, subdivision controls, building controls etc.) should be promoted and enforced (Doebele, 1972:6). The regulations of local authorities embrace zoning in land use schemes and planning requirements (Feiock, 2004:363). The land use scheme is defined as a document for regulating land uses (SPLUMA, 2013). This is a tool that is utilized by local authorities (municipalities). Davis (1976: 64) defines “zoning” as a means to delineate on any land, uses or activities considered as compatible through mapping presenting zones. The author further presents that each zone classify permitted uses and applicable concomitant regulations (e.g.

restrictions). Sudonienè and Matonienè (2009:155) present that land use control is inherently a local government concern, the land use changes which are cumulative in nature (in terms of effects) often (and or sometimes) require the intervention of the regional and national spheres of government. The zoning regulations are applied to separate land uses in order to minimise conflicts between incompatible (and sometimes inconsistent) land uses (Baker, 2010:7). It is argued by Maantay (2002:572) that zoning regulations define the typology of land uses and density that may be permitted in a property within a municipality and further provides restrictive control measures to govern environmental and health effects of a land use. It can therefore be argued that the density of any business activity (including alcohol outlets) can be controlled through the application of zoning restrictions. Furthermore, planning decisions through the regulation process should embolden crowdsourcing (Fennell, 2013:386) which ultimately presents the element of utility-type of regulation (Mendelker, 972:20). In this context, public participation has to be at the centre of land use decision making. The level of public participation needs to be pertinently articulated in land use policy frameworks to guarantee the incorporation of public views. The application of zoning as a land use regulation strategy is an inseparable and indispensable element of land use planning which must coherently relate to existing spatial plans (spatial development framework or compressive plans) of local authorities (Davis, 1976:65).

3.4 Summary of literature review

The chapter has discussed the debates that relate to the conceptualisation of the study at length. It is clear from the discussion that socioeconomic impact is not socioeconomic change. In addition, socioeconomic impact is further explained as influenced by socioeconomic change processes. This impact is identified as affecting individuals, institutions and communities. The density of alcohol outlets is presented as having a significant positive correlation with various alcohol-related harms and other amenity effects. Density is defined as measured in terms of unit per area or unit per population. The chapter highlighted that internationally, there are no uniform guidelines for alcohol outlet density in residential areas. Land use planning is comprehensively discussed as the means to regulate alcohol outlets in residential areas in terms of density and other restrictions through zoning and other land use policies. It is apparent from the discussion herein that the incompatibility of a land use in the residential area is informed by key performance standards which are factors that have to be investigated and evaluated against a proposed land use. The regulation of alcohol outlets as “land use” is further explained as the strategy to promote land use compatibility by discouraging or eliminating land use conflict. Public participation is summarised in the chapter as key to land use decision making process. It is the conclusion of the chapter that the socioeconomic impact of alcohol outlets is evident and a cause for concern that may be partially or completely addressed through land use regulation.

4. CHAPTER 4: LEGISLATIVE AND POLICY FRAMEWORK IN SOUTH AFRICA

The chapter aims to respond to the research sub-question 1 presented in the box below.

1. What is the legal mandate for providing guidelines for alcohol outlets?

The chapter reviews the legislative and policy framework for alcohol outlets/liquor licensing. It further presents a summarised discussion of the evaluation of the liquor legal framework applicable in all nine provinces of the Republic of South Africa (RSA), in particular, with the focus on the incorporation of alcohol outlet density, locality, application process (in particular public participation) and operations in regulation. Moreover, the cross-analysis providing the comparison of the reviewed pieces of laws for the nine provinces of RSA is presented in this chapter. The legislative review is undertaken to establish if factors/processes that contribute to the compatibility of alcohol outlets (on-site consumption alcohol outlets) with residential areas are considered. Finally, the chapter concludes with a discussion of the applicable local policy informants of the study area in relation to alcohol outlet regulations.

4.1 Introduction

In general, the legislative and policy framework in the RSA and internationally is adopted and enacted (where applicable) to regulate the social, economic, environmental, political, institutional, cultural, equity and other aspects of life. In South Africa (SA), the Constitution (Act 108 of 1996) is considered as the supreme law which is the foundation for all other pieces of legislation, by-laws and policies applicable in the Republic. In simple terminology, this implies that, the preparation, consideration and adoption of all policies, by-laws and laws for all aspects of life in all spheres of government and private sector **must** be consistent with the provisions of the Constitution. In terms of Part A (Schedule 5) of the Constitution, the provincial sphere of government is the authority mandated with liquor licensing. Notwithstanding the mandate of the province, on the other hand, the Constitution in terms of Section 151 read with Section 156, mandates municipalities to govern the affairs of their community and matters that are reasonably necessary for the effective performance of their powers and functions. Nationally, the liquor industry is governed by the National Liquor Act,

2003 (Act 59 of 2003) which gives powers to provinces to adopt their own laws which are consistent with its prescriptions and the provisions of the Constitution. The nine provinces of the RSA which include Eastern Cape, Free State, North West, Northern Cape, Gauteng, KwaZulu-Natal, Mpumalanga and the Limpopo have adopted independent yet interrelated liquor Acts to govern the manufacturing and trading of liquor in their spheres of jurisdiction. Although these Acts are consistent with the provisions of the National Liquor Act it is imperative to review and evaluate each provincial Act on the incorporation of alcohol outlet density, locality, application process (in particular public participation) and operations in regulation. The study in Figure 1-1 (conceptual framework) identifies the aforementioned four variables as regulation factors that are crucial in the reduction of land use conflict/mismatch and amenity effects. Local authorities are largely or entirely mandated to deal with municipal planning of their jurisdiction in terms of the Act 108 of 1996. The recognition and participation of municipalities in liquor licensing is therefore crucial in the consideration of safety, health, economic and other effects that may arise as a result of any liquor application under consideration. The following section provides a comprehensive review and evaluation of provincial liquor Acts including the local policy informants of the study area.

4.2 The Review and Evaluation of Provincial Liquor Acts

The discussion hereunder presents the review and the evaluation of liquor Acts for the nine provinces of the RSA which include Eastern Cape, Free State, North West, Northern Cape, Western Cape, Gauteng, KwaZulu-Natal, Mpumalanga and Limpopo.

4.2.1 The Eastern Cape Liquor Act, 2003 (Act 10 of 2003)

The object of the Act is to make provisions for the registration of retail sales and micro-manufacturing of liquor in the Province, to encourage and support the socioeconomic and other costs of excessive alcohol consumption by creating an environment in which:

- a) Appropriate steps are taken against those selling liquor outside the administrative and regulatory framework established in terms of the Act.
- b) Those involved in the liquor industry may attain and maintain adequate standards of service delivery
- c) Community considerations on the registration of retail premises are taken into account ; and
- d) The particular realities confronting the liquor industry in the Province can be addressed

Three categories of liquor licence registration are provided for and these include:

- a) the retail sale of liquor for on-consumption premises where the liquor is being sold;
- b) the retail sale of liquor consumption for off-consumption on premises where the liquor is being sold; the retail sale and consumption of liquor on and off the premises on which the liquor is being sold;
- c) the retail sale and consumption of liquor at special events; and micro-manufacturing.

The Act does not provide clarity on the types of outlets that are considered to either fall within the category of on-consumption premises or off-consumption premises. The Act provides the level of details required in an application for a natural person, a company of close corporation, a company except for one which is listed on the Johannesburg Stock Exchange, a Trust; and an Association or Partnership. The applicant in terms of the prescriptions of the Act is required to include the description of the property/premises from which the applicant intends to sell liquor including a plan of the premises in the application documentation. The Act further requires the applicant to state whether premises affected by an application are in existence or not. It is the provision of the Act that in cases where premises are not in existence, the applicant must furnish details of the steps to be taken in the event of the application for registration being approved.

In relation to public participation on application process, Section 2 of the Act provides that the applicant must issue notices to pertinent institutions, that include the ward committee of the affected community and the governing body of every education institution and place of worship within a radius prescribed by the MEC from the premises in respect of which the application is made. The ward committee is required in terms of Section 2(d)(i) to consult the community of the area where the premises are to be situated and simultaneously submit a report to the Board which will review the application as well as the relevant municipal council. This process affords the community an opportunity to inspect and obtain a copy of the application in order to make representations on their acceptance of or objection to the proposed activity (liquor outlet). The Board is required by the Act to consider the application within 60 days upon receipt of evidence that the application has complied with the provisions of the Act, the ward committee report and any further information provided by the applicant. It is the provision of Section 4 of the Act that the Board can only register an applicant if the Board is satisfied that the registration complies with the requirements for registration and no objections have been received. However the level of participation of the local municipality is not clearly defined although the ward committee is required to submit its report to council of the municipality. It could be said that council decision other than only the report of the ward committee must in all processes of liquor licensing be indispensable.

With regards to trading and operation hours, the Act stipulates that despite any other law, a registered person may sell liquor on any day of the week and during the hours determined by the municipality in whose area of jurisdiction the premises are situated. The table below provides the evaluation of the Act in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation.

Table 4-1: Evaluation of Eastern Cape Liquor Act, 2003

Evaluation criteria	Results	Level of Acceptance
Alcohol outlet density	The Act does not provide for the density requirement for an area.	Low
Alcohol outlet location	The Act does not stipulate requirements for the location of liquor outlets in particular in relation to sensitive institutions.	Low
Application process (participation)	The Act provides for the involvement of the community in decision making including sensitive institutions such as education and places of public worship.	High
Operations	The Act has no provision for trading hours that should be applicable across the board. It provides that trading hours should be in terms of the requirements of the applicable municipality.	Low
Total Level of Incorporation		Low

Source: Own construction, 2013

The provisions of the Act do not contribute much to ensuring that liquor outlets are compatible with residential areas. The Act as a legal instrument has to be explicit on issues of alcohol outlet density, locality and operations. The Act however, does promote public participation in the decision making process.

4.2.2 The Free State Gambling and Liquor Act, 2010 (Act 6 of 2010)

The subject legislation covers both gambling and liquor trading in the Free State Province. The object of the Act in regard to liquor include-

“- to reduce the socio-economic and other costs of alcohol abuse by:

- a) Implementing essential national norms and standards in the liquor industry as determined by the National Liquor Act
- b) Regulating the micro-manufacturing and retail sale of methylated spirits; and
- c) Providing for public participation in the consideration of applications for registration

- promoting the development of a responsible and sustainable liquor industry in a manner that facilitates:

- a) The entry of new participants in the industry
- b) Diversity of ownership in the industry
- c) An ethos of social responsibility in the industry; and
- d) Local tourism and economic growth”

The Act, in terms of Section 46, identifies two categories of registration certificates for liquor regulation which include on-consumption (accommodation establishments, restaurants, clubs, taverns, special events, gambling and night clubs) and off-consumption (liquor store, grocer’s wine, micro-manufacturing of methylated spirits and special events). With regard to the application process, the Act states that any person may register as a micro-manufacturer or retail seller of liquor or methylated spirits, or both with the exception of a minor, an un-rehabilitated insolvent person, person convicted in terms of the Act and any other Act for elements inconsistent to the Act. In terms of Section 5 of the Act the Free State Gambling and Liquor Authority through its Board may grant or refuse an application based on compliance of the applicant to the requirements of the Act. Section 6 read with Section 7 of the Act provides a clear composition and eligibility of the Board members in terms of designation and affiliation. According to the Act applicants are required to comply with Section 21 on submission of applications. In terms of Section 28 (2) the Act requires the Authority to consider proposed measures in an application for addressing amenity effects (such as alcohol abuse), economic and social benefits. Furthermore, Section 28 (4) of the Act states that the Authority in the consideration of any application must take due regard of issues of:

- a) Public interest;
- b) Proximity of proposed premises to institutions of learning, places of public worship and existing outlets;

- (i) The ratio of population vis-à-vis the number of outlets in the relevant wards;
- (ii) The report from the relevant municipality received in terms of Section 31;
- (iii) The reports, views, comments and objections contemplated in Section 31 to 35 of the Act.

The Act however does not stipulate radius restrictions applicable to proximity between outlets and in relation to the institutions of learning and places of worship. The Authority is further required to consider outlet density by taking into account the ratio of the population in relation to the number of outlets per applicable wads. In literature it is argued that the density of alcohol outlets is measured in terms of population or area affected. The Act, though it requires the issue of density to be considered, however excludes details on the specific density per population as may be required. The municipality plays a crucial role in decision making in terms of the Act as the report from the applicable municipality with regards to the application is a requirement for processing or considering an application by the Authority. In terms of the Act a report from the relevant local municipality must include information pertaining to:

- a) Zoning of the relevant premises
- b) Traffic impact in respect of patterns, congestion, entrances and exits, and parking requirements
- c) Environmental health
- d) Any other matter which the municipality deems necessary for consideration

The consideration of reports, views, comments and objections by the Authority is to ensure that the proposed activity is compatible in the area in which it is proposed and is accepted by the local authority, interested and affected parties. The Act in terms of Section 31 (3) requires reports to incorporate one from South African Police Services (SAPS) regarding the suitability of the application. It is evident from literature that liquor outlets are strongly linked to crime effects and the report from SAPS is important to weigh issues of crime in relation to the existing outlets and proposed outlets. Although the municipality and SAPS are involved, the Act provides no clarity on the level of community participation during the application approval process. In relation to business times (operation), the Act states that the holder of a registration certificate may sell liquor on any day during the prescribed times. Furthermore, the holder of a registration certificate, excluding an accommodation establishment, restaurant, club, gambling business, grocer or any other business as prescribed, must close his or her business in not more than 30 minutes after the prescribed time for selling liquor. Holders of on-consumption registration certificates are required to ensure that liquor sold thereunder is consumed on registered premises only.

With regard to tavern registration certificates, the holder is expected to ensure that the registered premises are separated from any other dwelling by means of solid walls. The holder may further provide light meals, dancing and entertainment in the form of light musical entertainment not exceeding the relevant decibels, as well as within any other prescribed measures. These restrictions on taverns are mainly to ensure compatibility and reduction of adverse effects. The table below summarises the evaluation of the Act in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation.

Table 4-2: Evaluation of Free State Gambling and Liquor Act, 2010

Evaluation criteria	Results	Level of Incorporation
Alcohol outlet density	The Act does not provide the actual density requirement for an area. However it makes provision for the consideration of population ration and existing outlets.	Medium
Alcohol outlet location	The Act does consider the issue of proximity to institutions of learning, places of public worship and existing outlets. It further requires the municipality to consider zoning, traffic, health and other effects that may results from the proposed activity.	High
Application process (participation)	The Act provides details on the involvement of the municipality and the SAPS however it excludes information on the participation of the general public in relation to the considered application. Nevertheless the issue of public interest is considered by the approving Authority.	Medium
Operations	The Act, with specific reference to taverns (on-consumption) in residential areas is clear on the manner in which such facility must be operated in relation to the positioning, musical instruments (noise effect) and trading hours.	High
Total Level of Incorporation		Medium

Source: Own construction, 2013

The Act in terms of ensuring compatibility through the regulation of liquor licensing does promote the consideration of critical factors for the compatibility of alcohol outlets within a specific area.

4.2.3 The Liquor Act, 1989 (Act 27 of 1989) as Amended

This Act is applicable in North West, Limpopo, Mpumalanga and KwaZulu-Natal Provinces. Although the Mpumalanga and KwaZulu-Natal provinces have enacted provincial legislations, these legislations have not been implemented. The object of the Act at hand is stated in the preamble as to provide for the control over the sale of liquor, and for matters connected therewith. In terms of Section 20 of the Act two categories are identified in which, each has various types of liquor licenses which may be granted which include consumption ON licensed premises (hotel liquor licenses, restaurant liquor licenses, wine house licenses, theatre liquor licenses, club liquor license, sorghum beer, special licenses, temporary liquor license and occasional licence) and consumption OFF the licensed premises (wholesale liquor license, brewers' license, liquor store licenses, grocer's wine license, wine farmers license, sorghum beer brewers license, sorghum beer license, special license and producers license). In terms of the Act the matters relating to the granting of licensing for any of the above categories vests with the Liquor Board. The Act in Section 22 stipulates the conditions under which the Liquor Licensing Board will not issue a license and these include:

- a) For a wine farmer's license, unless the premises, in respect of which the application is made, are situated at a place other than the place where the liquor concerned is manufactured.
- b) For special licenses unless it is the Boards opinion that the exceptional circumstances warrant granting the license.
- c) For a producer's license unless the Board is satisfied that the premises in respect of which the application is made are situated on or at the land, central cellar factory or brewery where the liquor concerned is manufactured

The Act further highlights that liquor licenses may not be granted unless the premises are or will on completion be suitable for the purpose for which they will be used under the license. It is the provision of the Act that if the premises are situated in the vicinity of place of worship or school or in a residential area, the business will be carried out in a manner that would not disturb the proceeding in that place of worship or school or residents of the residential area; the applicant concerned is of good character and is otherwise fit to be holder of the license and the granting of the license is in the public interest. The consideration of amenity effects of liquor outlets in terms of the Act within the vicinity of sensitive institutions (place of worship or school) or within a residential area is to ensure that the proposed use is not conflicting with other land uses. The Board, in terms of Section 22, is further

required to consider whether the granting of the application may cause harmful monopolistic conditions to arise or be aggravated in the liquor trade or branch thereof. The Act excludes provisions for public participation and the involvement of the relevant local authority (municipality). In terms of the Regulations of 1992 of the Act, applicants are only required to advertised or publish a notice of intent in the government gazette. The government gazette alone is not sufficient to reach the affected community as most people are either unaware of or without access to it. The lack of public participation as a requirement defeats attempts to assess and attain substantial information on the impact of proposed outlets within an area. The municipality being constitutionally mandated to deal with municipal planning has the responsibility to provide input on any approval processes in relation to the use of land within its area of jurisdiction. The Act disregards the mandate of the relevant authority thereby acting in contrary to the provisions of the Constitution. In terms of Section 6 of the Regulations, 1992 the application is only circulated to a designated police officer for assessment and compilation of police report.

The designated police officer, in terms of the regulations, is not required to ascertain adjacent owner's consent or any public participation process. Regarding times of business (operation), the Act in Chapter 7 stipulates that the license holder may sell liquor between 10:00 on any day and 02:00 on the following day irrespective of whether any one of the days is a closed day or not for both on-consumption and off-consumption premises. The Act provides that the holder of license has the right to sell and not to sell alcohol to any person. The Act however has provision that allows the Liquor Board to impose certain conditions in the exercise of its powers. For instance, the Mpumalanga Liquor Board (MLB) has added other requirements that must support an application for liquor license which are not incorporated in the Act which include consent letter from neighbours, tribal authority resolution, and a letter of approval from the local municipal council in terms of zoning. It is argued by the MLB that these requirements are often contested by most applicants as they are not prescribed in the Act and its concomitant regulations. Table 3-3 provides the evaluation of the Act in respect of the incorporation of alcohol outlet density, location, application processes and operations in regulation.

Table 4-3: Evaluation of the Liquor Act, 1989 as Amended

Evaluation criteria	Results	Level of Incorporation
Alcohol Outlet Density	The Act does not provide the alcohol outlet density requirements for an area.	Low
Alcohol outlet location	The Act does consider the assessment of effects for the location of outlets in the vicinity of places of worship or schools although with no mention of a specific radius. The Act is however not specific on other issues that could be considered in the consideration of application	Medium
Application process (participation)	The Act has no provision for the effective involvement of affected community and relevant local authority and other institutions in decision making except the SAPS.	Low
Operations	The Act provides specification on operation hours and further makes reference on liquor trading.	Medium
Total Level of Incorporation		Low

Source: Own construction, 2013

It is clear from the evaluation table that the Act as a regulation tool does not extensively contribute to the reduction of amenity effects of alcohol outlets by the regulation of alcohol outlet density, locality and public participation in decision making and operations. The successful realisation of compatible land uses is dependent on practical and lucid regulations.

4.2.4 The Northern Cape Liquor Act, 2008 (Act 2 of 2008) as Amended

The object of the Act is to provide for the promotion of responsible consumption of liquor in the Northern Cape as well as to reduce the socioeconomic problems emanating from alcohol abuse and related matters by:

- a) Determining norms and standards for those involved in the liquor industry in the Province;
- b) Creating an environment for greater participation of communities by making them aware of a pending application through advertisement;

- c) Accommodating new entrants in the industry, thereby promoting the development and the diversification of ownership;
- d) Regulating retail sale and micro-manufacturing of liquor and methylated spirits in the Province;
- e) Considering land use planning as determined municipal town planning schemes and other instruments of land use planning; and
- f) Regulating the consumption of liquor in public places.

It is apparent from the object of the Act that land use planning and public participation is at the centre of the regulation of liquor licensing in the province of the Northern Cape. Section 4 of the Act presents that no person may undertake the micro-manufacturing of methylated spirits or the retail sale of methylated spirits without permission granted by the Provincial Liquor Board appointed in terms of the Act. In terms of Section 16 of the Act three categories through which licenses may be granted are identified and include on-consumption (hotel, restaurant, wine-house, theatre, club, sorghum beer, drinking house, tavern, guest house, night club, gambling house; or sports club), off-consumption (liquor store, grocer selling wine, or a business selling sorghum beer) and a license for micro-manufacturing of liquor.

In terms of the application procedures, Section 20 stipulates that the application must be lodged with the Board by registered mail or by hand and must include:-

- a) Written motivation in support of the licence applied for
- b) A sketch plan indicating the size of the premises approved by the municipality
- c) A written description of the premises to which the application relates with photographs of the external and internal features of the premises
- d) Proof of publication of notices of the application in at least 1 newspaper circulating in the area as well as in the provincial gazette and the full business address and location of the premises to which the application relates.
- e) Proof of payment of or application fees

It is a further requirement of the Act that the application must be accompanied by a report from the relevant local municipality detailing the correct zoning of the property concerned, health and safety considerations regarding the intended use of the property and any other matter that the local municipality may deem necessary to be part of the report to enable the Board to make a decision regarding the application and a memorandum detailing the applicants proposed contribution to combating alcohol abuse in terms of the Act. The requirement for advertisement in the local

newspaper is to ensure the participation of the general public in relation to providing representation and objections on the proposed land use (alcohol outlet licensing). The requirement of municipal report fully provides recognition of the role of municipality in planning decision in particular on the effects that may result from the granting and disapproval of an application. The involvement of the local municipality in terms of the Act is that within 14 days of receiving the application, the Board must forward the application to the relevant Municipality for the attention of the ward councillor and ward committee for purposes of consultation with the community concerned. The comments of the municipality must then be forwarded to the Board within 30 days of receipt of the application from the Board. It is the provision of Section 22 of the Act that the Board when reviewing and considering the application takes into account the following:

- a) Location of the proposed premises and proximity to institutions of learning, graveyards and places of worship, where such trade may result in the interference of such institutions;
- b) Applicant's proposed contribution to combating alcohol abuse;
- c) The extent to which the approval of the applicant may prejudice the residents of the affected area;
- d) Whether granting the application will be contrary to the public interest.

The effects of the submitted application within the area it relates to are considered in terms of the Act in the context of public interest to redress socioeconomic effects of alcohol outlets. The Act in its amended version of 2010 states that the holder of a liquor license may sell liquor on the licensed premises between 10:00 and 24:00, Monday to Sunday and no liquor may be consumed on the licenced premises for a period of more than 30 minutes after 24:00. The holder of a liquor store license, grocer's wine license and sorghum beer license may only sell liquor between 08:00 and 20:00 Monday to Friday and between 08:00 and 17:00 on a Saturday or public holiday other than a closed day. The Act makes provision for the separation (by a solid wall) of an area for selling liquor from the area for groceries. However it does not provide any details on the on-consumption premises. The evaluation of Act in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation is summarised in the table below.

Table 4-4: Evaluation of Northern Cape Liquor Act, 2008 as Amended

Evaluation criteria	Results	Level of Incorporation
Alcohol outlet density	The Act excludes the provisions for alcohol outlet density requirement for an area.	Low
Alcohol outlet location	The Act considers the issue of proximity to institutions of learning, places of public worship and graveyards. It further requires the municipality to consider zoning, health and safety including other effects that may results from the proposed activity.	High
Application process (participation)	The Act provides details on the involvement of the general public and municipality. Public participation is also ensured through advertisement of notice in the local newspaper. This therefore affords all affected parties an opportunity to make representations and objections where necessary.	High
Operations	The Act clearly stipulates the trading hours. However it does not provide more detail in dealing with amenity effects of on-site consumption premises and compliance with other legislation and policies/by-laws of the local municipalities.	Medium
Total Level of Incorporation		Medium

Source: Own construction, 2013

4.2.5 The Gauteng Liquor Act, 2003 (Act 2 of 2003) as Amended

The Act in terms of Section 19 establishes 6 local committees of the Board (Johannesburg, Tshwane, Ekurhuleni, Bronkhorstspuit, Vereeniging and Randfontein) made up of community members and legal representatives which make recommendations on whether or not applicants may be granted liquor-trade licenses. In terms of the Act each committee is represented by not less than five members and not more than 7 members. The local committees then, in terms of powers and functions as set out in Section 21 of the Act, make recommendations in respect of all applications and submit them to the

Board immediately after careful consideration. The Act requires that applications submitted be accompanied by a number of documentation as enumerated in Section 23 (1) of the Act. Section 28 of the Act identifies three categories which provide different kinds of licenses and they include on-consumption (hotel liquor licences, restaurant liquor licences, theatre liquor licences, club liquor licences, night club liquor licences, gaming premises liquor licences, sports ground liquor licences, pub liquor licences, dance hall liquor licences, tavern liquor licences, pool club liquor licences, sorghum beer licences and catering or occasional permits) and off-consumption (wholesale liquor licences, liquor store licences, grocers' wine licences and micro-manufacturer liquor licence and sorghum beer licences) premises and any other license that the Board, in its discretion will deem appropriate.

The Act further articulates in Section 23 (4) that applications for tavern, pool club, pub, liquor store and night club liquor licences shall also be accompanied by an unequivocal approval by the relevant department of the relevant metropolitan or district council, in addition to any zoning or planning or environmental laws requirements. It is evident in terms of the mentioned section that council decision plays a vital role in the consideration of liquor license approval. This could be attributed to fact that municipalities have more insight into planning issues in the areas of their jurisdiction. In terms of further public participation the Act in Section 24 (1) states that every applicant shall give notice of an application by publication in no less than two newspapers circulating in the area in which the premises are situated, in the prescribed manner, and in the Provincial Gazette as well as causing the notice to be affixed at the affected premises. The advertisement of notice as a call for comments, views, representation and objections through newspapers, site notice and Provincial Gazette is to allow the community within the area where the application relates to participate in the decision making process. The utilitarianism perspective of social justice provides that if a large number of people are happy with a proposed action without objections, such activity is acceptable. The public participation is therefore a means to determine the level of satisfaction on the proposed liquor license application. The Act in terms of Section 24 (3) further requires the applicant to furnish adequate information regarding their surroundings including the name and nature of educational institutions, names of and distance to other licensed premises and places of worship within a **1km radius of the application premises**. The Act in Section 30 prescribes that the Board on the advice of local committees will not grant any license on premises within **500m radius** of place of worship, educational institution, similar license premises and public transportation facilities. The Act further provides that the Board may grant an application if:

- a) the premises are or will, on completion, be suitable for the purposes for which they will be used under the licence;

- b) the applicant concerned is of good character and is otherwise fit to be the holder of the licence;
- c) the granting of the licence is in the public interest;
- d) the possibility does not exist that the granting of the application may cause a harmful monopolistic condition to arise or be aggravated;
- e) or the premises, accommodation, equipment and facilities in respect of which the licence is to be issued are, or will be, if the applicant is licenced, in compliance with this Act and regulations.

The interests of the public in terms of the Act are important in considering an application and this includes socioeconomic impact of the proposed facility. In terms of operations, Section 41 of the Act states that premises (on/off consumption) must have a public area not less than the prescribed size. The Act in the same section presents that premises shall at all times comply with all laws, metropolitan or district council by-laws and regulations, including health and smoking laws. It is clear that the holder of the license is not only required to comply with the provisions of the Act rather with all other related Acts and policies of the local council. On taverns specifically the Act mentions that the holder of a tavern licence shall at all times ensure that the licensed premises are separate from any other dwelling, especially a residential dwelling or if attached to any dwelling, it shall be separated by means of walls and securable doors. The licensee shall at all times provide food and various forms of entertainment, of acceptable standards, on the licensed premises. The provision for taverns is to ensure the reduction of ill social effects of the outlet within a residential area. The table below provides the evaluation of the Act in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation.

Table 4-5: Evaluation of the Gauteng Liquor Act, 2003 as Amended

Evaluation criteria	Results	Level of incorporation
Alcohol outlet density	The Act indirectly provides the alcohol outlet density requirement by stating that no approval must be granted within the 500m radius of place of worship, educational institution, similar license premises and public transportation facilities	Medium
Alcohol outlet location	The Act does consider locality as it suitably states that no license shall be granted within 500m radius of a place of worship, educational institution, similar license premises and public transportation facilities. It further requires an unequivocal approval of the application by the relevant department of the relevant metropolitan or district council. This is to ensure that amenity effects are considered such as traffic, health and safety to name a few.	High
Application process (participation)	The Act provides details on the involvement of the general public and municipality. The public participation is also ensured through advertisement of notice in the local newspaper and Provincial Gazette. This therefore affords all affected parties an opportunity to make representations and objections where necessary.	High
Operations	The Act clearly stipulates that the premises to comply with prescribed trading hours. It further articulates the importance of compliance with other policies and municipal by-laws. It is provision of the Act in particular on-site consumption premises to deal with amenity effects.	High
Total Level of Incorporation		High

Source: Own construction, 2013

In terms of the evaluation, the Act is found to be comprehensively addressing issues of proximity and amenity effects in the application process for the regulation of liquor premises.

4.2.6 The Western Cape Liquor Act, 2008 (Act 4 of 2008)

The Act has no provision explaining its object. In terms of Section 2 read with Chapter 3 of the Act, the Western Cape Liquor Board is empowered to consider, process, grant, reject and revoke liquor licenses through the Liquor Licensing Tribunal. The Act in terms of Section 33 identifies six categories of licensing which include the following:

- a) a licence for the micro-manufacture and sale of liquor for consumption both on and off the premises where the liquor is sold;
- b) a licence for the sale of liquor for consumption on the premises where the liquor is sold;
- c) a licence for the sale of liquor for consumption off the premises where the liquor is sold;
- d) in exceptional circumstances, a licence for the sale of liquor for consumption both on and off the premises where the liquor is sold;
- e) a licence for the sale of liquor for consumption on or off the premises upon which liquor is sold at special events; and
- f) a temporary liquor licence for the sale of liquor for consumption on or off the premises upon which liquor is sold.

The Act is comparable to those Liquor Acts of the Mpumalanga and Eastern Cape Provinces which have no provisions for details of the typology for licenses issued in either consumption on the premises or consumption off the premises. Applicants of liquor licensing are required by the Act to make submissions for applications as prescribed in Section 36. In terms of public participation; the Act provides that the Board must publish a notice in three different languages on the community newspaper and Provincial Gazette. The Act in Section 37 further provides that where there is no community newspaper at least one newspaper circulating in the area of the premises under application must be used. The applicant is further required to maintain or affix a notice on site in a conspicuous position for passer-by to be able to read. In addition, the Act requires the designated liquor officer to serve the applicable municipality with a copy of the application in order to:

- a) allow the public to have access to, inspect, upon payment of the prescribed fee and obtain a copy of the application;
- b) obtain the comment of the ward councillor;
- c) comment on the application; and

- d) allow for the consideration of the planning application in relation to the application for a liquor licence.

The Act displays clearly that the municipality has a substantial role to play in the decision making process of liquor licensing. The municipality or the designated liquor officer is further required by the Act to give notice of the application to adjacent/neighbouring residents of the affected premises and the applicable community policing forum for comments, view, representations and objections (if any). Section 34 read with Section 41 of the Act provides that the Liquor Licensing Tribunal may grant application if it is satisfied that:

- a) The granting of the license is in the public interest;
- b) The applicant is of good character, and not disqualified from holding a liquor license in terms of Section 35;
- c) The premises on which the sale or consumption of liquor will be suitable for purposes of the license;
- d) The applicant has the right to occupy the proposed license premises;
- e) Granting the application does not prejudice :
 - Community of a residential area;
 - Community of an institution for the aged and frail;
 - Learners of an educational institution under 18 years;
 - Patients of an institution for drug or alcohol dependency; and,
 - Congregants of a religious institute located in the vicinity of the proposed license premises.

The Act presents that granting of application must at all times consider the public interest and the effects that the license will have on immediate institution and neighbourhood. Albeit the Act is silent on the issue of proximity, it details the need to consider amenity effects of applications. In terms of Section 59 of the Act, the holder of a license is required to comply with prescribed trading times. The Act – in the same section- further, states that the applicable municipality by-laws on trading days and hours supersede the prescribed trading days and hours set out in the Act. The Act does not impose conditions for license holders to implement mitigation measures for amenity effects. The table below provides the evaluation of the Act in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation.

Table 4-6: Evaluation of the Western Cape Liquor Act, 2008

Evaluation criteria	Results	Level of Incorporation
Alcohol outlet density	The Act does not provide the alcohol outlet density requirements for an area.	Low
Alcohol outlet location	The Act does consider the location of liquor premises by considering the effects the premises may have on the community in the residential area, community of an institution for the aged and frail, learners of an educational institution under 18 years, patients of an institution for drug or alcohol dependency, congregants of a religious institute located in the vicinity of the proposed license premises. The municipality is also required to provide comments on the application. This indirectly means that the municipality has to consider zoning, traffic, health and safety issues including other effects that may results from the proposed activity.	High
Application process (participation)	The Act provides details on the involvement of the general public and municipality. The public participation is also ensured through advertisement of notice in the local newspaper and Provincial Gazette in three different languages. The applicant is further required to affix a notice on site. The adjacent owners and community policing forum is also consulted. This therefore affords all affected parties an opportunity to make representations and objections where necessary.	High
Operations	The Act clearly stipulates the trading days and hours. It is in terms of the Act that trading hours and days of any license may not exceed recommendations made by the Municipality. The Act has no provisions that state the importance of compliance to other legislations and measures for redressing amenity effects in residential areas.	Medium
Total Level of Incorporation		Medium

Source: Own construction, 2013

4.3 Analysis of all Provincial Liquor Acts

The analysis presents the comparison of performance by all provincial liquor Acts in relation to the incorporation of alcohol outlet density, locality, application process (in particular public participation) and operations as stated in the regulation. The attainment of good quality of life in a neighbourhood is dependent on the regulation of business and activities taking place in societies. Table 4-7 below presents the summary of the cross analysis of the liquor Acts in the country for all Provinces. It is apparent from the table that nationally, improvement in addressing the issue of alcohol density in law is required. The pieces of liquor laws with their attendant regulations are identified as omitting provisions for alcohol outlet density. In this variable of the evaluation, seven of the nine provinces have performed poorly in terms of the incorporation of alcohol outlet density measures. The remaining two provinces (Free State and GP) have performed at an average as their legislations present the consideration of radius within specific uses which indirectly and virtually addresses the alcohol outlet density factor. The evidence from this analysis explains the rationale for the **significant positive correlation of on-site consumption alcohol outlet density with amenity effects** presented in national and international literature. In light of these results it can be argued that there is a patent failure of regulators to consider alcohol outlet density as an earnest factor in regulation. It is imperative that a standard guideline for density consideration be adopted either per population ratio or area or any other means. On the issue of locality, the Eastern Cape Liquor Act is the only law that neglects the consideration of sensitive institutions (learning and religious institutions) though it provides for the consultation of such stakeholders during the application process.

The other legislations incorporate adequate information on the locality, in certain instances- the radius for the location of alcohol outlets against sensitive institutions are explicitly presented. The review and evaluation presents that provinces apply different radius standards which reflect inconsistency. The national standards for radius on location of alcohol outlet premises against institutions of learning, religious facilities, graveyards and other sensitive facilities have to be adopted and incorporated in the National Liquor Act, 2003 as an amendment. The Free State Act grossly excludes the provision for the participation of the general public on application process hence the municipality and the SAPS are consulted. It is crucial that consultation with the general public, that is likely to receive the effects of approved licenses, be prioritised and any compromise is not an alternative. This Act has to be reviewed and amended accordingly as it does not uphold the principles and prescriptions enshrined in the Constitution. However, the Free State Act is to be commended when compared to the Liquor Act, 1989 which is applicable in the North West, Limpopo, KZN and Mpumalanga provinces that completely or entirely disregard effective public participation of the general public, applicable local municipality and other institutions.

This Act has to be reviewed and amended to be consistent with the Constitution and the National Liquor Act, 2003. The EMM (2013) provides that in most decisions taken by the liquor board on liquor licensing, the eThekweni Metropolitan Municipality is not consulted. It is also evident from consultation with the Umjindi Local Municipality that council is normally not consulted on decisions regarding liquor applications. This is mainly because the Act, 1989 has no provisions which identify local authorities as key role players in the decision making process of liquor license applications.

It is worth noting that the other five liquor legislations provide comprehensive details on public participation of the general public and institutions. These Acts further identify the relevant local municipality as key in informing decisions made by the relevant Liquor Authority/Board. When it comes to operations, the trading days and hours are totally inconsistent in all reviewed Acts. It is the findings presented in the review and evaluation that the approval of most licenses excludes measures that applicants must comply with in redressing amenity effects. This in particular includes the level of permitted noise (from musical instruments) including traffic, health and safety matters amongst many others. It can thus be summarised that in terms of the analysis the Liquor Acts applicable in Eastern Cape, North West, KZN, Mpumalanga and Limpopo provinces have performed unacceptably in terms of the incorporation of the identified evaluation variables. On the other hand, the GP Liquor Act stands out alone in terms of the incorporation of the alcohol outlet density, locality, and application process and operation guidelines. The liquor Acts of the Northern Cape, Western Cape and Free State Provinces depict average performance on the level of incorporation of all stakeholders' views. All this then brings the national overall performance to average when all the results of all liquor Acts of the nine provinces are combined.

Table 4-7: Cross Analysis of all applicable Provincial Liquor Acts

EVALUATION CRITERIA	LIQUOR PROVINCIAL LEGISLATIONS						NATIONAL SCORE	LEVEL OF INCORPORATION
	EC	FS	NW, LP, KZN and MP	NC	GP	WC		
Alcohol outlet density	Low	Medium	Low	Low	Medium	Low	Low	
Alcohol outlet location	Low	High	Medium	High	High	High	Medium	
Application process (public participation)	High	Medium	Low	High	High	High	Medium	
Operations	Low	High	Medium	Medium	Medium	Medium	Medium	
Total Level of Incorporation	Low	Medium	Low	Medium	High	Medium	Medium	

Source: Own construction, 2013

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
EC	EASTERN CAPE	MP	MPUMALANGA
FS	FREE STATE		
NW	NORTH WEST		
NC	NORTHERN CAPE		
GP	GAUTENG		
KZN	KWAZULU-NATAL		
WC	WESTERN CAPE		
LP	LIMPOPO		

4.4 The Umjindi Local Municipality Policy Informants

The Umjindi Local Municipality can thus evidently be seen as not having a fool-proof policy related to liquor/alcohol outlets or licensing applicable in its area of jurisdiction. The available policy on land uses is the Spatial Development Framework (SDF), 2010 and the Umjindi Town Planning Scheme (TPS), 2002. Liquor outlets licensing is in fact related to land use planning and management in relation to the land use rights that a property must have to exercise permitted uses. The SDF of the municipality as a strategic planning tool providing directives for land use planning in the municipal area has no provision for the guidelines of alcohol outlet licensing or establishment. This presents a cumbersome constraint that may be termed “**less of regulation**”, that is, no provisions for alcohol outlet density, locality, application process and operation. The applicable TPS though provides development control measures such as zoning for individual properties, it however excludes provisions for restrictions that may be applicable to all properties which are permitted to manufacture and/or sell liquor. In terms of Clause 12 of the Town Planning Scheme, 2002 alcohol outlets are indirectly permitted in the zonings of “Business” where places of refreshment, shops, social halls and hotels are permitted.

The Scheme defines “places of refreshment” as including a restaurant, tearoom or coffee shop and means a building which is a hotel, residential club, drive-in restaurant or boarding house but which is designed and used for the preparation or the retail of meals or refreshment, as well as the retail sale of fresh produce, mineral waters, tobacco, reading materials and sweets. On the other hand, a “shop” is defined by the Scheme as a land use or building designed or used for the purpose of carrying out retail trade and the necessary accompanying storage and packaging, and includes any accompanying use on the same site which is incidental and subordinate to the conduct of the retail business: Provided that such accompanying storage and package and accompanying use shall not give rise to disturbance or inconvenience to any. Although the scheme provides the business zoning, it is silent on liquor outlets and zoning and uses where such premises are permitted. It can only be assumed that a shop as a permitted use of the “business” zoning could also serves the purpose of off-site consumption alcohol premises and not for on-site consumption premises. The on-site consumption alcohol premises in the “business” zoning are only permitted through a special consent use. The result of the study in Chapter 5 presents the zoning details of properties where alcohol outlets are being operated in the study area. The Scheme in properties zoned for “residential” has a provision that allows property owners to apply for consent to use such facility for home enterprises and special uses which are not permitted in terms of the Scheme. The application for special consent in residential zoning could be construed as the means in terms of the scheme for the attainment of land use rights for home enterprises and special uses which could therefore include taverns in residential areas. Land use rights granted in terms of a

special consent are considered as temporary and may be discontinued anytime at the discretion of the municipality. This then implies that such rights may cease to apply if it is in the opinion of the municipality that the property owner has violated the conditions of approval. The municipality, at present, has no guiding tools whatsoever for dealing with the establishment and effects of liquor outlets. It is critical for the local authority to either adopt a dedicated policy that provides guidelines for alcohol outlets or adopt guidelines for incorporation in the applicable SDF and TPS of the municipality. The municipality is identified in terms of the Mpumalanga Liquor Act (which is not yet applicable hence enacted) as a stakeholder that must submit its report and consent on any license application under advisement. The absence of guidelines to this effect is a challenge the municipality has in addressing liquor outlet related matters including related applications where provided.

4.5 Summary of legislative and policy review

The chapter presented that the Constitution (Act 108 of 1996) of the Republic of SA as the supreme law of the country which is the foundation for all other pieces of legislation, by-laws and policies applicable in the Republic. It is clear from the chapter that its main objective relates to responding to the research sub-question 1. The chapter has provided a detailed review of liquor Acts applicable in all the nine provinces of the Republic of South Africa. The review further incorporated the evaluation of each liquor Acts in terms of the incorporation of alcohol outlet density, location, application processes and operations in regulation. The review and evaluation of liquor Acts clearly presented the extent of incorporation in relation to the four mentioned evaluation variables. Gauteng liquor legislation is deemed excellent in the incorporation of the alcohol outlet density, locality, and application process and operation guidelines. Furthermore, the liquor Acts of the Northern Cape, Western Cape and Free State Provinces are found to be on the average on the level of incorporation. The chapter further presented that Mpumalanga, North West, KZN and Limpopo provinces are still using the Liquor Act of 1989 which leaves a lot to be desired. The Mpumalanga and KZN provinces are identified having adopted and enacted provincial liquor Acts without full implementation thereof. The chapter indicated the overall national performance of liquor Acts being at average. Although the overall national performance on liquor Acts is at average, specific requirements for alcohol density are lacking in law. It is articulated in the chapter that there is a need for the adoption of national standards for alcohol outlet density that shall be prescribed in law. The case study applicable municipality is discussed in the review as not having any policy specifically dedicated to liquor establishment and regulation. However, the municipality is found to have adopted two land use policies- the Spatial Development Framework (SDF), 2010 and the Umjindi Town Planning Scheme (TPS), 2002. These policies are proven here not to have incorporated guidelines for alcohol outlets when alcohol outlets are inherently a land use issue.

5. CHAPTER 5: DATA ANALYSIS, INTERPRETATION, PRESENTATION AND DISCUSSIONS

The previous chapters, in particular the literature and legislative review, have revealed that the density of alcohol outlets has a significant correlation with amenity effects that include, violence, assault, high rate of alcohol consumption, car accidents and odours to name few. The legislative review has comprehensively presented the shortfall in regulation on the regulation of alcohol outlet density in societies. This chapter aims to respond to research sub-question 3, 4 and 5 as presented below.

3. To what extent are on-site consumption alcohol outlets densified in the Umjindi Municipal area of Jurisdiction?
4. What is the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures are applied in addressing them?
5. What are the preferred and practical guidelines that should be adopted to ensure that on-site consumption alcohol outlets are compatible with land uses in residential areas?

The chapter, in responding to sub-question 3 commences by presenting the process of liquor license approval by the Mpumalanga Liquor Board (MLB). The process is discussed to provide an understanding of the implementation of the applicable Liquor Act in the approval of alcohol outlet applications which is directly and indirectly associated with alcohol outlet density. It further provides a discussion on the number of liquor licenses in particular, that have been granted for on-site consumption alcohol outlets in the Ehlanzeni District area of jurisdiction. The details of existing alcohol outlets in the study case areas are presented in the chapter spatially. The chapter further provides a comparison of the number of alcohol outlets approved by the MLB against the number of existing alcohol outlets. There are disparities discussed hereunder on the number of alcohol outlets approved by the MLB and the number of existing alcohol outlets caused by mostly illegal operation of alcohol outlets. It is presented in Section 1.6 that the research is based on the utilitarian perspective which is focused on the utility notion. In terms of this perspective, the evaluation pleasure of a specific activity defines the acceptance level of such activity. In responding to sub-question 4 the chapter presents the findings in terms of acceptance level of the impact of the number of variables in relation to on-site consumption alcohol outlets per case area. Finally, the chapter concludes by providing findings and recommendations made on the preferred and practical guidelines that may be

adopted to ensure that on-site consumption alcohol outlets are compatible land use activities within residential areas.

5.1 The Mpumalanga Liquor Board and liquor licenses

The aforementioned board is considered as the liquor authority legally mandated in terms of the Liquor Act, 1989 to consider, grant, refuse, suspend and revoke any liquor license within the Mpumalanga Province (MP). The board is guided by a standard legal process prescribed in terms of the Act, 1989 to process applications for liquor licensing. In the execution of its functions and duties, the MLB considers areas of the Mpumalanga Province in terms of Magisterial Districts as required by the Act, 1989. This section discusses the applicable process in MP for liquor license application through a schematic presentation of the process. It further presents the range of licenses that have been granted by the MLB in the Ehlanzeni District (ED) of the Mpumalanga Province since its establishment. This information presents the density and demand of liquor licensing in the ED.

5.1.1 The process for liquor license application

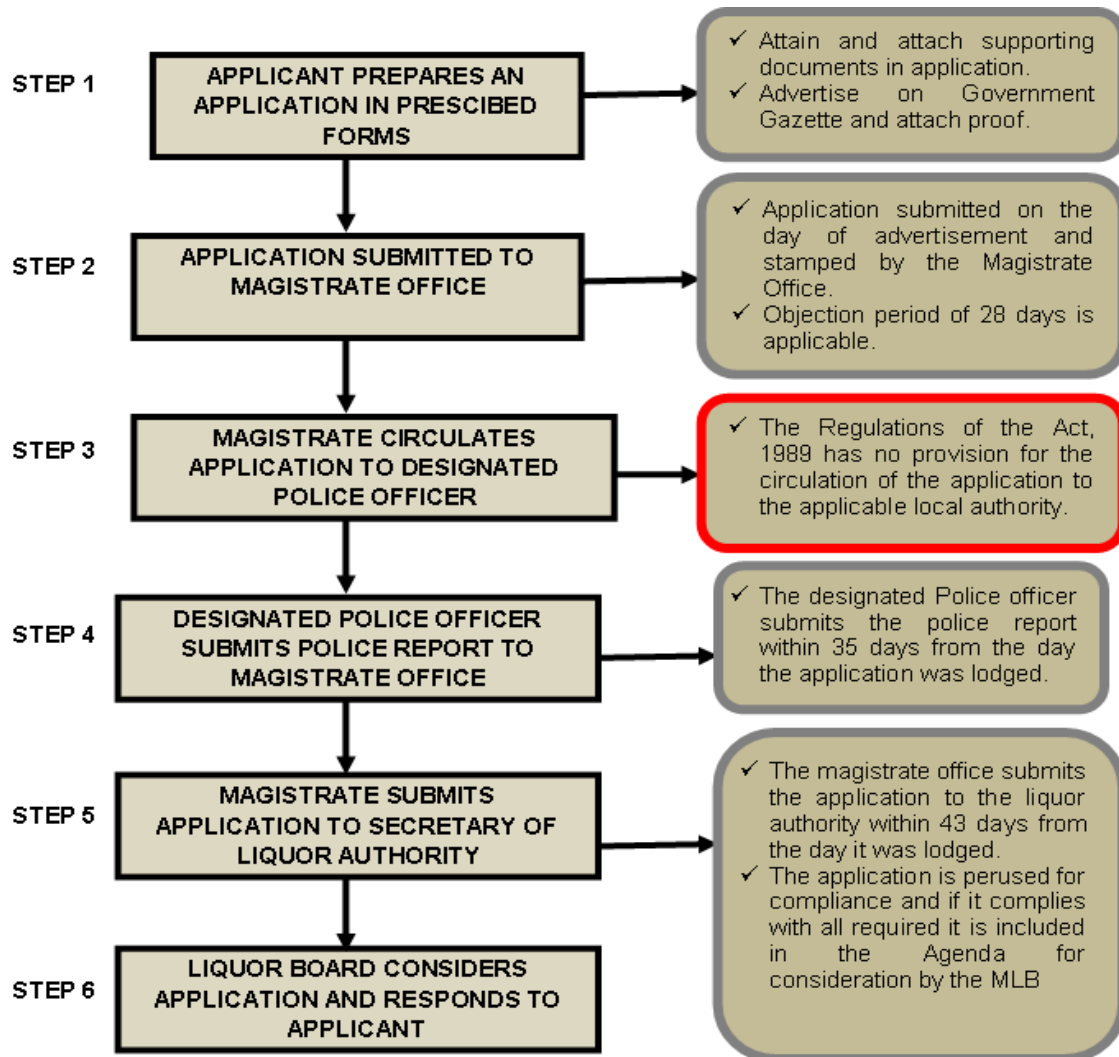
The process for liquor license application is embedded in the Liquor Act, 1989 and it includes four role players: the applicant, magistrate office, SAPS office and the liquor authority. It is precise in the prescribed process that the applicable local authority (municipality) is not considered as the role player. The figure below provides the graphic flow diagram of the application process. It is presented by the process diagram that an application is first submitted to the magistrate office with all supporting documents that include the following as required by the applicable Liquor Act and liquor authority:

- a) A detailed plan/sketch plan of the premises;
- b) A detailed written description of the premises or colour photographs of the premises (if already erected), including smoking and non-smoking areas in terms of Tobacco Products Control Amendment Act, 1999 to which the application relates;
- c) A detailed written representation/motivation in support of the license applied for, including public interest, proximity to schools, place of worship, clinics/hospitals, highways and railway lines;
- d) Proof of payment of the lodgement fees;
- e) Proof of advertisement in the Government Gazette
- f) Any other supporting documentation such as:

- (i) Consent from neighbours
- (ii) Tribal resolution (as the case maybe);
- (iii) A letter of approval from the local municipal council in terms of zoning;
- (iv) A copy of the lease agreement;
- (v) A copy of an identity document of the applicant and;
- (vi) A copy of the registration in case of a Close cooperation (CK Number) or a copy of the company registration certificate.

The supporting documentation required in terms of (f) above are not prescribed in terms of the Regulations of the Act, 1989 but, rather, additional requirements imposed by the Mpumalanga liquor authority.

Figure 5-1: Liquor license application process



Source: Own construction, 2013

The liquor authority requires that both the tribal authority and the municipal council be considered with the same authority. This therefore implies that if the tribal authority supports an application, the consent from the municipality may not be relevant or necessary. Subsequently, the Constitutional powers or mandate of local authority for municipal planning in particular deciding on land uses are bypassed. It is further articulated by the MLB that the non-submission of documents required in terms of (f) above does not disqualify an application from being considered by the liquor authority. However, in most cases, when such incomplete applications are received, the MLB either suspends its decision or provides a conditional approval. In terms of the application process, the magistrate office circulates the lodged application to the designated police officer for the preparation of the police report. The police, in reviewing the application and preparation of police report, consider the existing records of the applicant and proximity of the proposed outlet to sensitive institutions. The designated police officer who participated in the study indicated that the challenge in assessing applications is on the density and radius that should be considered on the location of alcohol outlets in the proximity of sensitive institutions. However, a norm of 500m radius to sensitive institutions is applied in particular, in the Barberton Magistrate District area in assessing applications, yet, it is not regulated. The contention in this regard confirms the need of guidelines for density and outlet location. The designated police officer hardly considers issues related to traffic, compatibility and health as such is not a SAPS functional area. In terms of the process the police report has to be finalised and submitted to the magistrate office within 35 days from the date on which the application was lodged.

The mentioned designated police officer articulates whether the zoning of properties is considered in the assessment process. Nevertheless, the Umjindi Local Municipality has argued that at present, it hardly participates in the application process for liquor licensing. It is the findings of the study that applications are recommended for approval on the basis of “business” zoning in terms of the zoning certificate received from the municipality. It is essential to note that the zoning certificate, without council’s consent permitting an on-site consumption alcohol outlet (tavern) in a residential area, is insufficient. In terms of the process after advertisement of the application in the Government Gazette the public has 28 days to lodge objections and representations on the application. In addition, the applicant is required to respond to any objection received within 42 days from the day on which the application was lodged. Furthermore, upon receipt of the police report the magistrate office is required to submit the application to the secretary of the liquor authority for processing. Therefore, on the 43rd day of submission of an application by an applicant, the full application with the police report has to be submitted (by magistrate) and registered (by the secretary of MLB) in the application registry of the liquor board. The liquor authority only considers any application which complies with the minimum requirements prescribed by the Liquor Act, 1989.

In addressing some of the effects that may arise from liquor outlets, the MLB normally and often imposes the following general conditions:

License is issued on condition that Section 22(d) (1)(cc) read with section 159 (a) of the Liquor Act, 1989 is complied with i.e.

- a) No loud music emanating from the licensed premises;**
- b) No littering on or near the licensed premises and or;**
- c) Any other related nuisance that may prejudice the neighbours.**

The above condition is sound in redressing noise effects and littering. However, the control of noise without a regulatory policy is impossible. In terms of Schedule 5 Part B of the Constitution (Act 108 of 1996) noise pollution, control of public nuisance and control of undertakings that sell liquor are the functional areas of the local government (municipalities). In the case of the study area the municipality has no policy that regulates noise in terms of decibels and public nuisance respectively. This therefore presents a challenge in contesting if an outlet owner has played music loud as there is no threshold of permitted noise levels set out in policy. It is crucial for the liquor legislation to be specific on the role the local authorities must play in redressing effects of liquor outlets. Currently, although such conditions are held in the Liquor Act and the mandate explicitly articulated in the Constitution, enforcement remains a “wish”. The Liquor Act in particular the new Mpumalanga Liquor Act which is yet to be implemented should be revised to incorporate a provision for enforcement powers granted to local authorities in liquor outlets operations to be consistent to the provisions of the Constitution. The practice, in terms of the Act, enforcement powers are vested with the liquor inspectors and the South African Police Services which therefore presents enforcement as tenuous. The Mpumalanga Liquor Board, since its establishment has considered thousands of applications. The following section provides the status on liquor license application statistics that have been granted by the liquor authority (since its establishment until the year 2012) in the Ehlanzeni District (ED) where the study area is located.

5.1.2 Liquor license approvals granted in the Ehlanzeni District

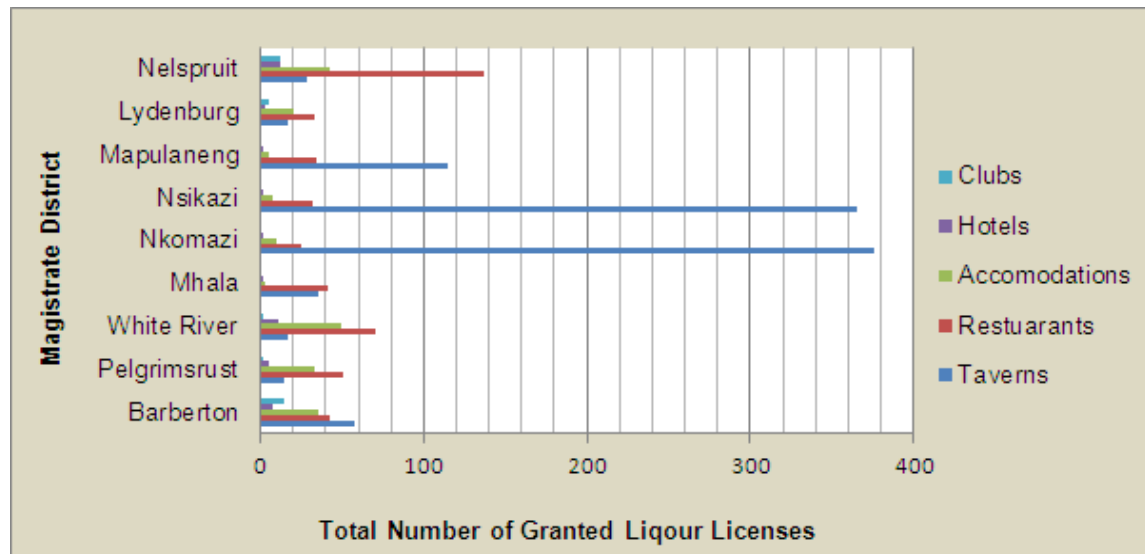
In terms of the Liquor Act, 1989, liquor applications are grouped in terms of magisterial districts. Table 5-1 and Figure 5-2 below present the statistics of liquor licenses that have been granted by the Mpumalanga liquor authority for on-site consumption alcohol outlets in the Ehlanzeni District area of jurisdiction.

Table 5-1: Liquor licenses granted in the Ehlanzeni District

No	Magistrate District	Type of Liquor License for on-site consumption					Total
		Tavern	Restaurant	Accommodation	Hotel	Club	
1	Barberton	58	42	35	8	14	157
2	Pelgrimsrust	14	51	33	5	2	105
3	White River	17	70	50	11	2	150
4	Mhala	35	41	3	1	0	80
5	Nkomazi	376	25	10	1	0	412
6	Nsikazi	365	32	7	2	0	406
7	Mapulaneng	115	34	5	1	0	155
8	Lydenburg	17	33	20	3	5	78
9	Nelspruit	28	137	42	12	12	231
Total		1025	465	205	44	35	1774

Source: Mpumalanga Liquor Board

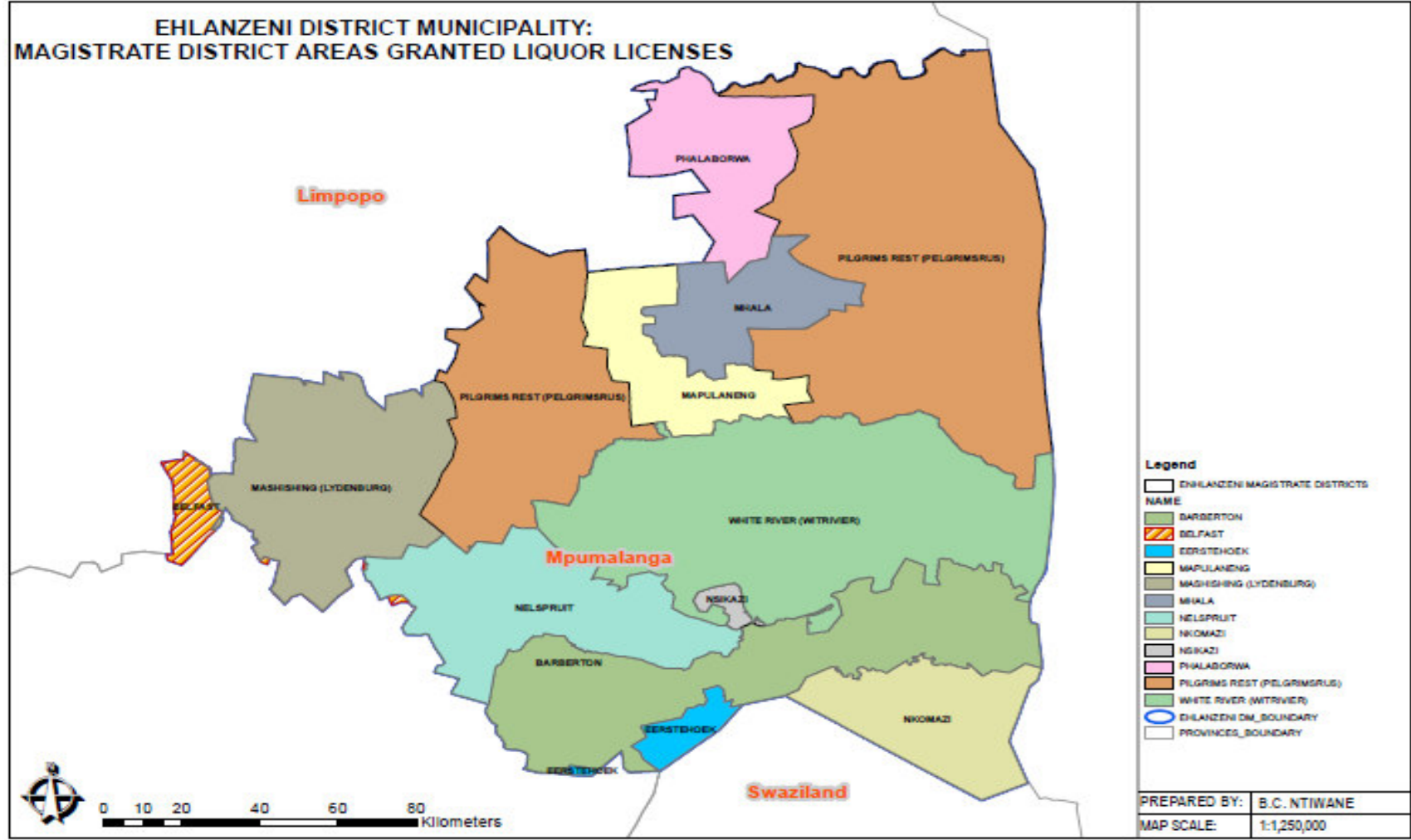
Figure 5-2: Liquor licenses granted in the Ehlanzeni District



Source: Mpumalanga Liquor Board

The case study area (all 16 extensions of Emjindini Townships) falls under the Magistrate District of Barberton. This district consists of Barberton (Emjindini and Barberton townships including rural areas except Louw's Creek), Louw's Creek, Malelane and Komartipoort.

Figure 5-3: Spatial presentation of the ED magisterial districts



Source: Own construction, 2013

The Table above 5-1 and Figure 5-2, make it clear that the Barberton Magistrate District is the fourth highest district in the ED that has been granted liquor licenses for taverns. Figure 5-3 presents the demarcation of the magisterial districts within the Ehlanzeni District. Table 5-1 and Figure 5-2 above excludes the magistrate districts of Belfast and Eerstehoek shown in Figure 5-3 as they overlap on other district municipalities. The significant proportion of tavern liquor license approvals is evident in Nkomazi, followed by Nsikazi and Mapulaneng Magisterial Districts respectively. The above discussed information must however not be construed as the actual number of existing taverns in these Magisterial District areas. In terms of the liquor license approvals granted in the ED the total number of taverns with liquor licenses is preponderant over clubs and other on-site consumption alcohol outlets premises by 58%. In terms of information gathered, 14 liquor licenses for taverns in the Barberton Magisterial District have been granted to the study area (Emjindini Townships). A total number of 37 applications of tavern liquor licenses were received from the magistrate office by the designated police officer in Barberton for the Emjindini Townships between the year 2007 and 2013. It is clear that only 38 % of the applications were approved. This indicates that not all applications are granted approval. The following section discusses the density of alcohol outlets in the study area. The information displays the number of existing on-site consumption alcohol outlets against the number of outlets with liquor licenses.

5.2 The density of liquor outlets in Emjindini Townships

It is the intention of the study to define the density of alcohol outlets in particular on-site consumption alcohol outlets within the study case areas. The discussion of density provides the total number of existing on-site consumption alcohol outlets in the Emjindini Townships. The information is presented spatially to show the reality of outlet density and regulation. The estimated number of households of the Emjindini Townships defined by the study is approximately 7535 and the existing discernible and known on-site consumption alcohol outlets identified in the study area are 96 in total. The table below provides a summary of the number of existing on-site consumption alcohol outlets per township of the Emjindini area.

Table 5-2: Summary of existing on-site consumption alcohol outlet per township

Extensions in the Study area	Total No. of households (approx.)	Total No. of identified outlets	Existing Ration per household
Emjindini Extension 1	364	5	1: 73
Emjindini Extension 2	427	8	1: 53
Emjindini Extension 3	489	5	1: 98
Emjindini Extension 4	60	1	1: 60
Emjindini Extension 5	17	0	0
Emjindini Extension 6	283	1	1: 283
Emjindini Extension 7	260	4	1: 65
Emjindini Extension 8	382	2	1: 191
Emjindini Extension 9	461	5	1: 92
Emjindini Extension 10	898	15	1: 60
Emjindini Extension 11	1274	28	1: 46
Emjindini Extension 12	590	5	1: 118
Emjindini Extension 13 and 14	1014	13	1: 78
Emjindini Extension 15	118	0	0
Emjindini Extension 16	476	2	1: 238
Phumula/Longhomes	422	3	1: 141
Total	7535	96	1: 78

Source: Own construction, 2013

The above table presents the status quo on the distribution and density of on-site consumption alcohol outlets per township as uneven. Table 5-3 below shows the variance distribution on the density of on-site consumption alcohol outlets in the study area.

Table 5-3: Variance distribution on the density of on-site consumption alcohol outlets

Extensions in the Study area	Total No. of identified outlets	Mean
Emjindini Extension 1	5	0, 05
Emjindini Extension 2	8	0, 08
Emjindini Extension 3	5	0, 05
Emjindini Extension 4	1	0, 01
Emjindini Extension 5	0	0
Emjindini Extension 6	1	0, 01
Emjindini Extension 7	4	0, 04
Emjindini Extension 8	2	0, 02
Emjindini Extension 9	5	0, 05
Emjindini Extension 10	15	0, 16
Emjindini Extension 11	28	0, 29
Emjindini Extension 12	5	0, 05
Emjindini Extension 13 and 14	13	0, 14
Emjindini Extension 15	0	0
Emjindini Extension 16	2	0, 02
Phumula/Longhomes	3	0, 03
Total	96	1

Source: Own construction, 2013

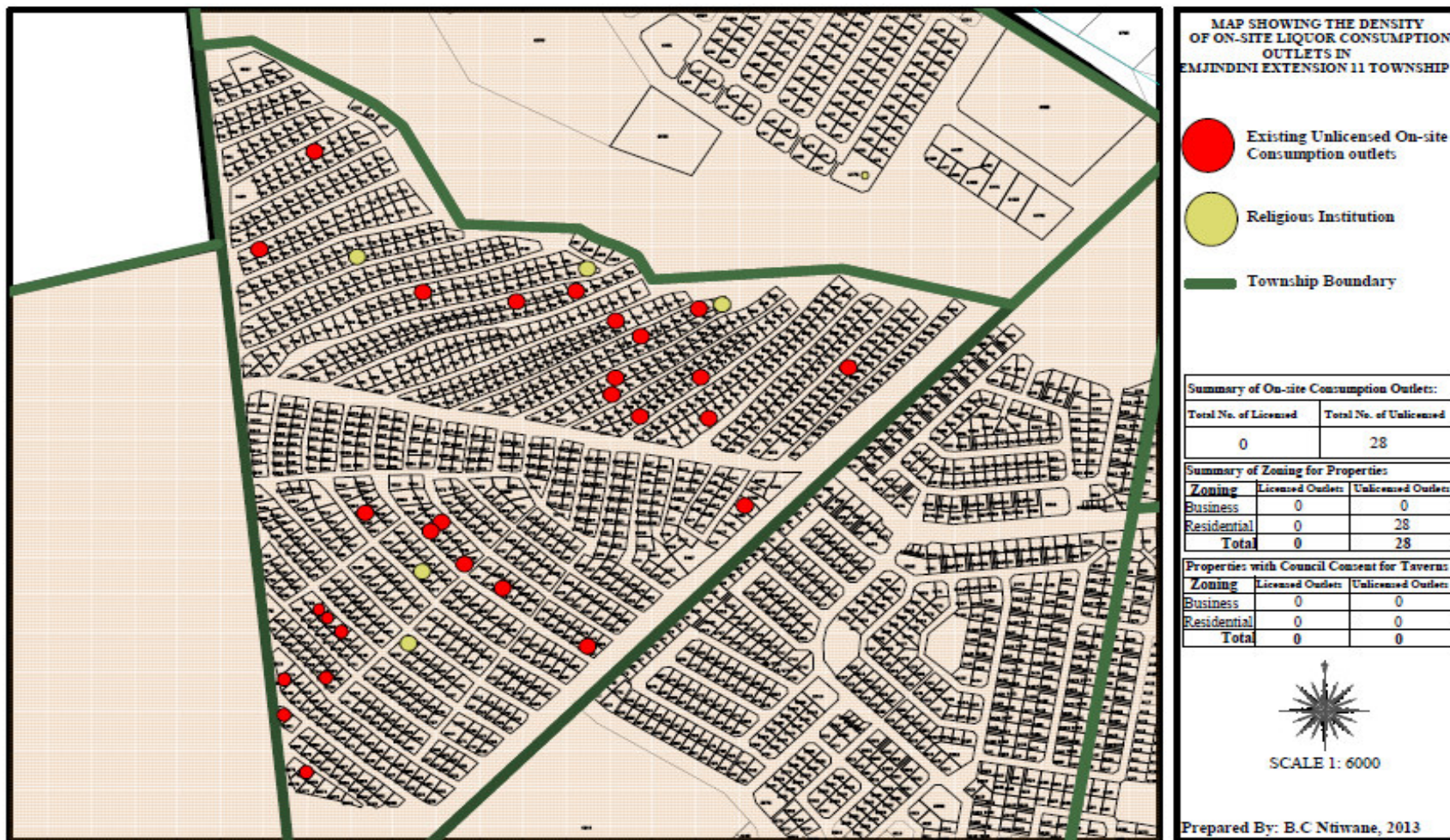
The above table indicates the significant variance when compared to other townships is experienced in the Emjindini Extension 11 Township with a mean of 0, 29. It is apparent from the overall ration that the Emjindini Townships have a density of 1 on-site consumption alcohol outlet for every 263 people.

5.2.1 Alcohol outlets density in Emj Ext 8, 11, 13, 14, 15 and 16 Townships

The aforementioned townships are predominantly low income areas characterised by informal structures and low cost housing. The Emjindini Extension 11 Township is identified as having a ratio of 1 on-site consumption alcohol outlet per 46 households which may be interpreted as 1 on-site consumption alcohol outlet for every 155 people as indicated in Table 5-2 above. Although the Emjindini Extension 11 Township has the highest density of on-site consumption alcohol outlets, the density is insignificant when compared to the density of Sao Paulo suburb in Brazil of 1 alcohol outlet for every 16 people. There is a marked increase in the mean of outlet density in the townships of

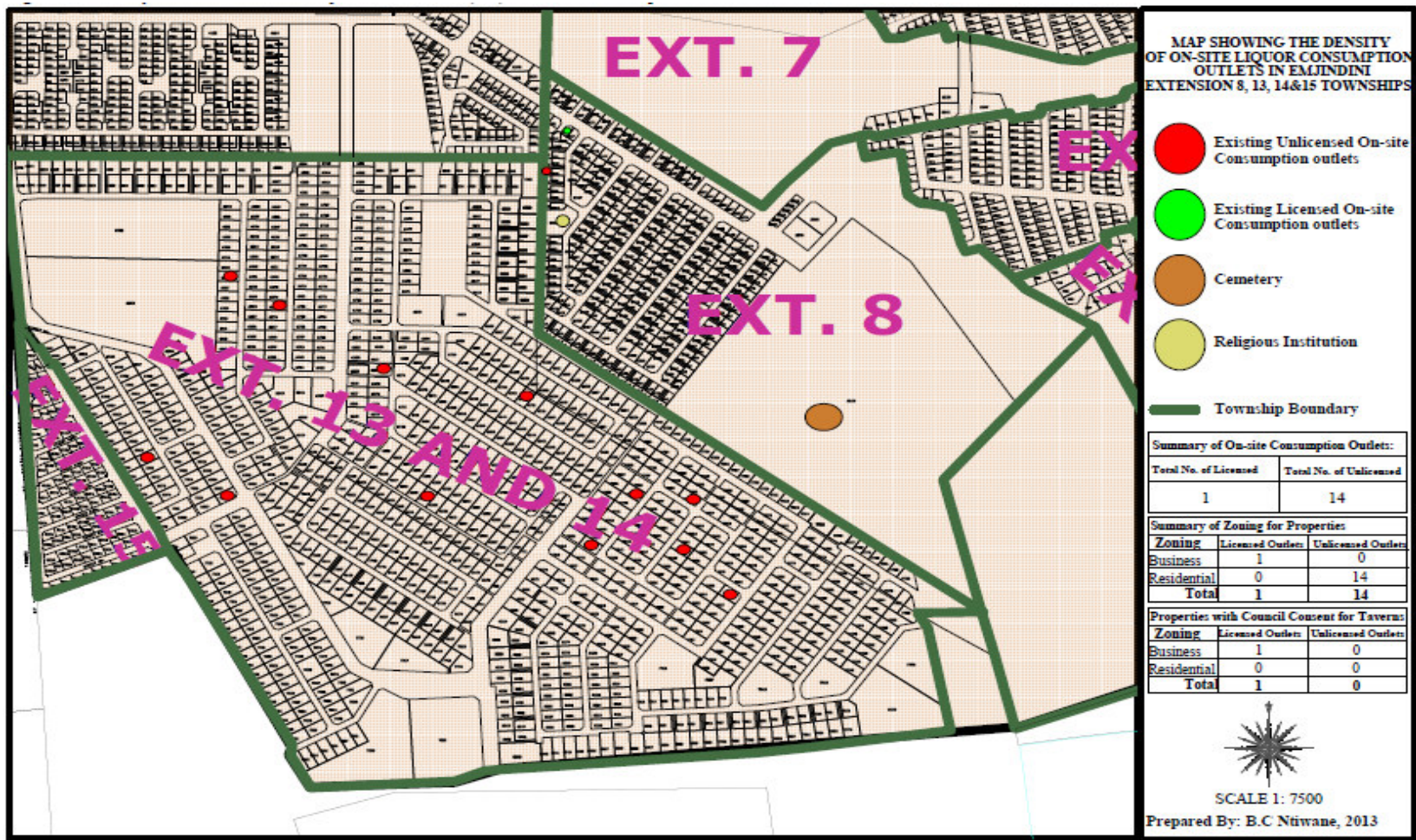
Emjindini Extension 10 by 0, 16, Emjindini Extension 11 by 0, 29, Emjindini Extension 13 and 14 by 0, 13 which may be associated with the low socioeconomic status of these townships. The significant density proportion of on-site consumption alcohol outlets in these areas confirms the contention of international researchers which revealed that the higher number of on-site consumption alcohol outlets is prevalent in areas of low socioeconomic status (LSS). Figure 5-4 and 5-5 below provide the spatial presentation of the density of on-site consumption alcohol outlets in Emjindini Extension 8, 11, 13, 14 and 15 Townships respectively. It is clear in Figure 5-1 that in Emjindini Extension 11 Township there is an on-site consumption alcohol outlet at every distance ranging between 50m and 150m. These outlets are seen to be operated in the low cost housing units provided to beneficiaries by the Mpumalanga Provincial government. It is of utmost importance to note that these housing units are also utilised for residential purposes. The Emjindini Extension 11 Township has a total number of 28 on-site consumption alcohol outlets operated on properties zoned “residential” with neither a liquor license nor special consent from the Umjindi Local Municipality.

Figure 5-4: Density of alcohol outlets in Emjindini Extension 11 Township



Source: Own construction, 2013

Figure 5-5: Density of alcohol outlets in Emjindini Extension 8, 13, 14 and 15 Townships



Source: Own construction, 2013

The Emjindini Extensions 8, 13, 14, 15 and 16 Townships have a combined total of 17 on-site consumption alcohol outlets. These outlets are operated in the low cost housing units that come from government human settlement programmes with the exception of one outlet in Emjindini Extension 8 Township. One on-site consumption alcohol outlet (in Emjindini Extension 8 Township) of the 17 exists legally and has a liquor license and a business zoning. It was confirmed by the study that 16 on-site consumption alcohol outlets found in Emjindini Extensions 8, 13, 14, 15 and 16 Townships are operated in properties with the zoning of “residential” with neither a liquor license nor a special consent from the local authority (Umjindi Local Municipality). The density of on-site consumption alcohol outlets in Emjindini Extension 13 and 14 is estimated at 1 on-site consumption alcohol outlet for every 263 people while the density of outlets in Emjindini Extension 15 and 16 Townships is 1 on-site consumption alcohol outlets per 1000 people.

The low variance in the mean of the density for both the Emjindini Extensions 15 and 16 Townships, characterised by informal structures and low cost housing, could be explained by the fact that these areas (townships) are fairly new in the Umjindi Municipality. More importantly, it can be posited that in the near future, the density of on-site consumption alcohol outlets in these townships, if unregulated, could be equal to those of Emjindini Extension 11, 10, 13 and 14 Townships. On the other hand, in Emjindini Extension 8 Township it is estimated that there is 1 on-site consumption alcohol outlets for every 644 people. In comparing the estimated number of households for Emjindini Extension 11 Township which is approximately 1274 and the households of Emjindini Extension 8, 13, 14, 15 and 16 Townships combined which are approximately 1990 in total, there is a significant variance when on-site consumption alcohol outlets are compared. In Emjindini Extension 13 and 14 Townships it is projected that there is an on-site consumption alcohol outlet at every distance of between 50m and 200m.

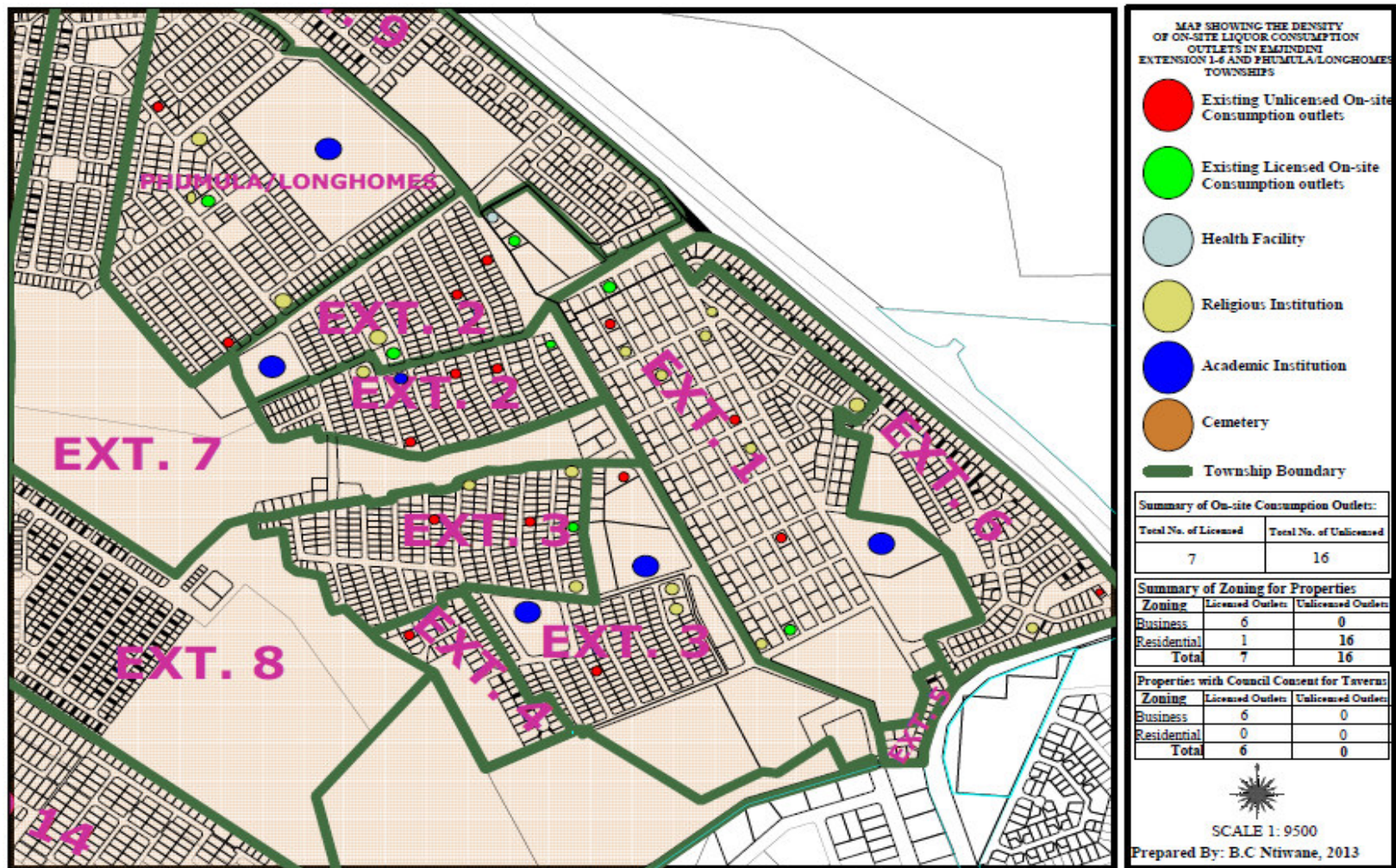
5.2.2 Alcohol outlets density in Emj Ext 1- 6 Townships

The density of these townships which received a mean of between 0 and 0.08 could be explained by their socioeconomic status as most of these townships fall in the category of middle income group or both low and middle income groups as presented in Table 2-3. For instance, Emjindini Extension 4 Township falls within the middle income group and has a density of 1 on-site consumption alcohol outlet per 200 people. On the other hand, the Emjindini Extension 4 and 6 Townships share a constant mean of 0, 01 respectively although the existing density is estimated at 1 on-site consumption alcohol outlet for every population of between 200 and 300 people.

It is presented in the Figure 5-6 and made clear that these townships have a total of 23 on-site consumption alcohol outlets of which, only seven outlets are recorded as having liquor licenses. Furthermore, approximately 74% (17 outlets) of the identified outlets are operated in properties zoned as residential though these properties are not identified as low cost housing. Six of the licensed on-site consumption alcohol outlets are operated in properties zoned for business purposes therefore with a special consent from the local authority. The significant increase on the density of these outlets is experienced in the Emjindini Extension 2 Township (variance of 0, 08) followed by the Emjindini Extension 1 and 3 Townships (variance of 0, 05) when compared to the density of outlets in Emjindini Extension 4 and 6 Townships (variance of 0, 01) including Phumula/Longhomes Township (variance of 0, 03).

The density of on-site consumption alcohol outlets of Emjindini Extension 1 Township is therefore estimated at 1 on-site consumption alcohol outlets for every 246 people while the density in Emjindini Extension 2 and 3 Townships combined is estimated at 1 on-site consumption alcohol outlets for every 246 people. Lastly, the density of Phumula/Longhomes Township is estimated at 1 on-site consumption alcohol outlets for every 475 people. Figure 5-6 below further presents that most of these outlets are located in the close proximity of academic and religious institutions. The distance of on-site consumption alcohol outlets against religious institutions is between 50m and 100m for either licensed or unlicensed on-site consumption alcohol outlets. This is therefore the rationale for the upsurge in popular concerns mostly reported to the local authority by the leaders of religious institutions.

Figure 5-6: Density of alcohol outlets in Emjindini Extension 1-6 Townships



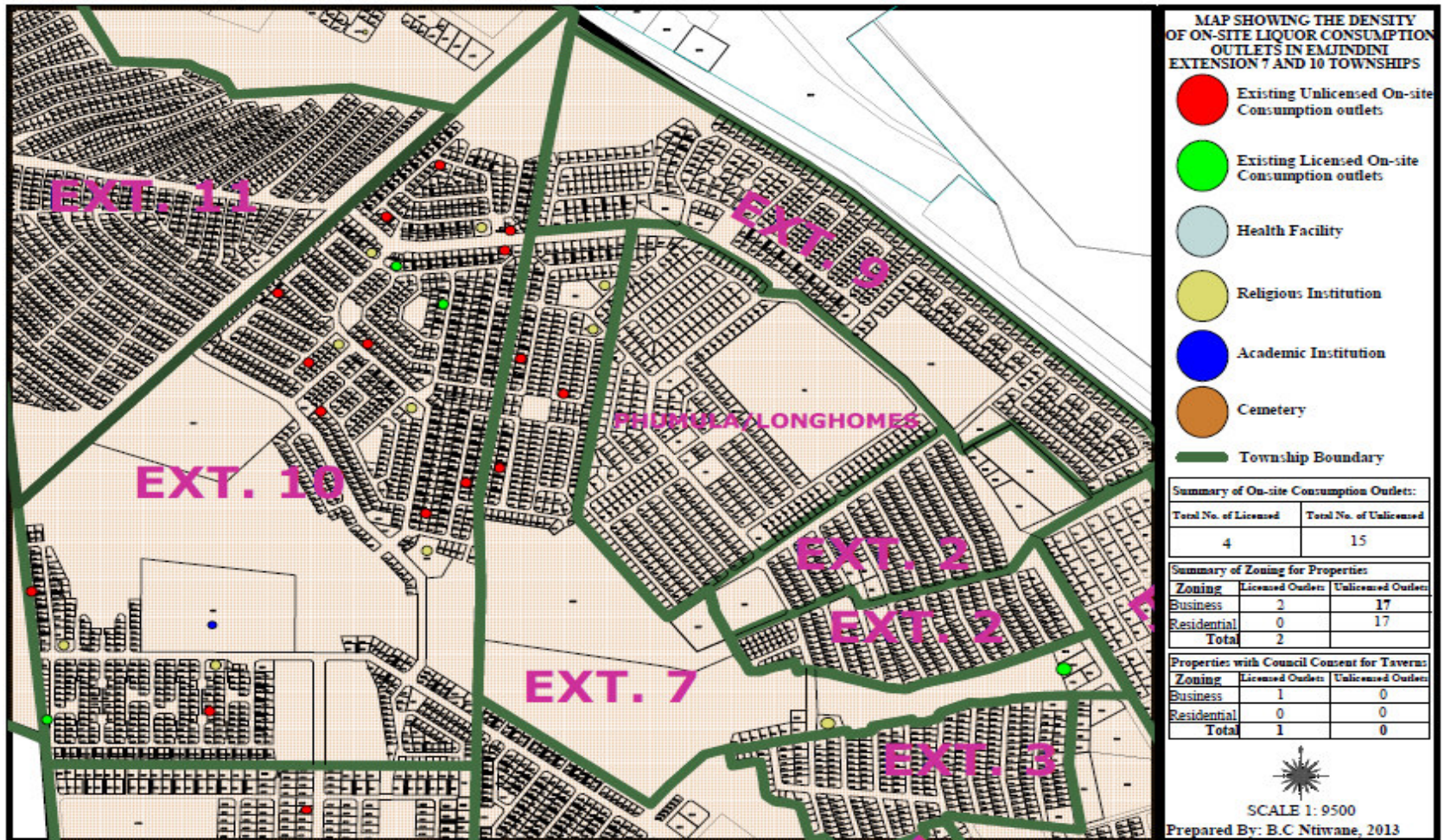
Source: Own construction, 2013

5.2.3 Alcohol outlets density in Emj Ext7, 9 10 and 12 Townships

These townships are considered to fall in the category of low and medium income socioeconomic status respectively. It is apparent in Figure 5-7 that the on-site consumption alcohol outlets abound in Emjindini Extension 10 Township when compared to the Emjindini Extension 1, 9 and 12 Township in particular. The Emjindini Extension 10 Township is estimated to consist of 14 on-site consumption outlets with one off-site consumption outlet. It is apparent from Figure 5-7 that 3 of the 15 alcohol outlets (in Emjindini Extension 10 Township) are confirmed as having liquor licenses while the remainder are without liquor licenses. Emjindini Extension 7, 9 10 and 12 Townships collectively have a total of 29 on-site consumption outlets (25 unlicensed and 4 licensed). Startlingly, only two of the licensed outlets are operated in business zoned properties while the other two licensed outlets are operated in residential zoned properties without the special consent of the local authority.

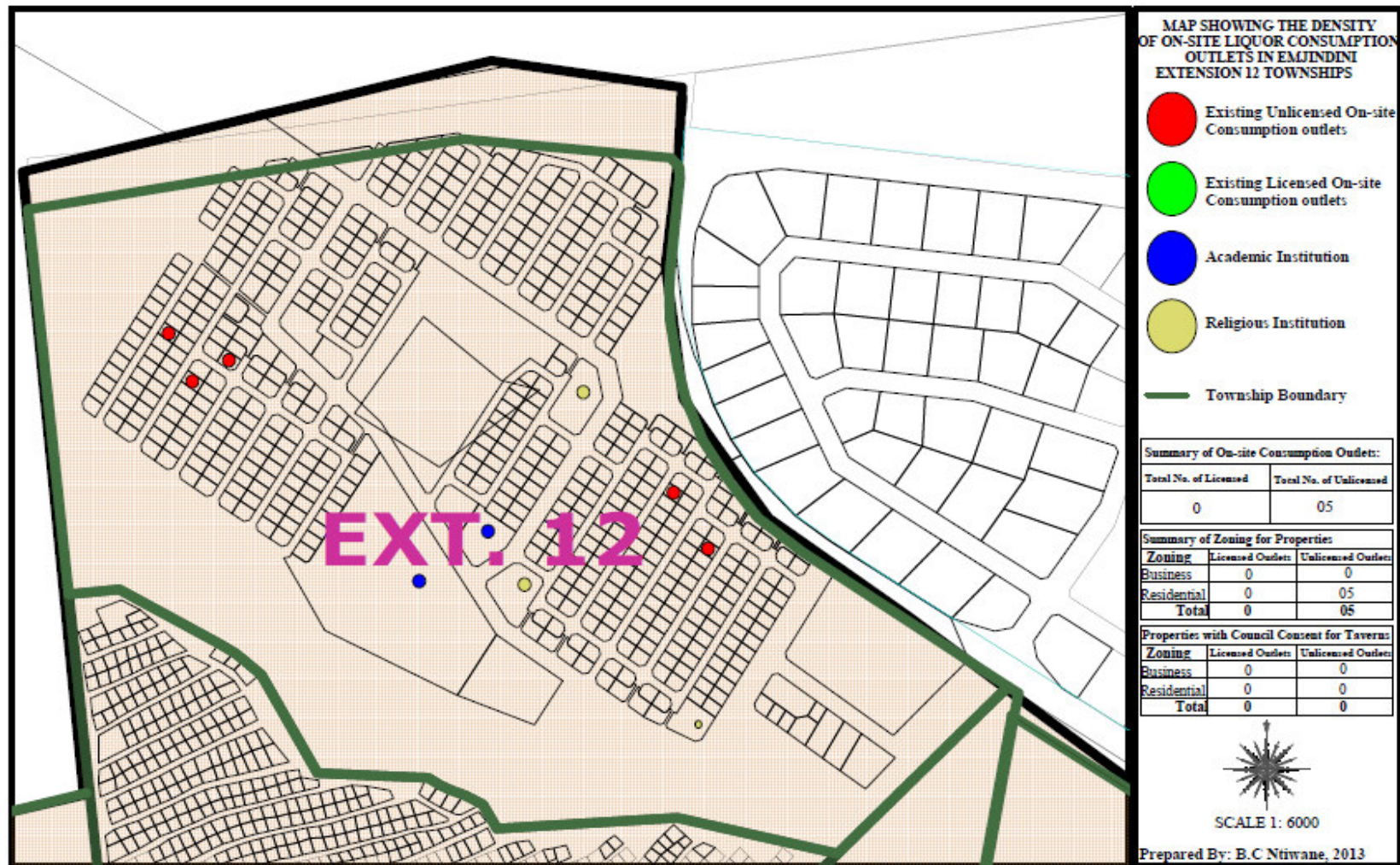
These results highlight the need of local authority involvement in decision making related to liquor license application. It is undoubted and confirmed that all 25 unlicensed outlets in these townships are being operated in low cost housing units benefited from government programmes. Further thereto, one of the licensed outlets in Emjindini Extension 10 Township is identified as approved in a low cost housing unit. In terms of on-site consumption alcohol outlet density the Emjindini Extension 10 Township is estimated to have a density of 1 on-site consumption alcohol outlet per 202 people equivalent to 1 outlet per 60 households. In addition, the Emjindini Extension 7 Township is estimated to has a density of 1 outlet per 65 households (1/219 people) while the Emjindini Extension 9 Township has a density of 1 outlet per 92 households (1/310 people). Lastly, in these townships the Emjindini Extension 12 Township has a less significant density of 1 outlet per 118 households (1/398 people). The distance of on-site consumption alcohol outlets in the proximity of academic and religious institutions in these townships is between 50m and 100m. The result presents a similar distance calculated or measured in Emjindini Extension 1, 2, 3, 4, 5 and 6 Townships.

Figure 5-7: Density of alcohol outlets in Emjindini Extension 7 and 10 Townships



Source: Own construction, 2013

Figure 5-8: Density of outlets in Emjindini Extension 12 Townships



Source: Own construction, 2013

5.2.4 Overall on-site consumption outlet density

The above results present different densities for each surveyed township. It is clear that the locality of on-site consumptions in all townships is in close proximity to sensitive institutions. The table below presents a summary of on-site consumption alcohol outlets density for each township in terms of households and population.

Table 5-4: Overall on-site consumption outlet density

Extensions in the Study area	Unit per household	Unit per population
Emjindini Extension 1	1: 73	1: 246
Emjindini Extension 2	1: 53	1: 178
Emjindini Extension 3	1: 98	1: 320
Emjindini Extension 4	1: 60	1: 202
Emjindini Extension 5	0	0
Emjindini Extension 6	1: 283	1: 954
Emjindini Extension 7	1: 65	1: 219
Emjindini Extension 8	1: 191	1: 644
Emjindini Extension 9	1: 92	1: 310
Emjindini Extension 10	1: 60	1; 202
Emjindini Extension 11	1: 46	1: 155
Emjindini Extension 12	1: 118	1: 398
Emjindini Extension 13 and 14	1: 78	1; 263
Emjindini Extension 15	0	0
Emjindini Extension 16	1: 238	1: 802
Phumula/Longhomes	1: 141	1: 475
Total	1: 78	1: 263

Source: Own construction, 2013

It is evident from Table 5-4 that Emjindini Extension 11 Township has the highest significant density of on-site consumption alcohol outlets in the Emjindini Townships followed by the Emjindini Extension 2 Township. The high density of outlets in Emjindini Extension 11 Township confirms the results of other international studies which indicate that areas with low socioeconomic status (LSS) are associated with higher density of alcohol outlets. The establishment of these premises is influenced mainly by the high level of unemployment. The on-site consumption alcohol outlets are considered as small business activities in the second economy and contribute to the local economic

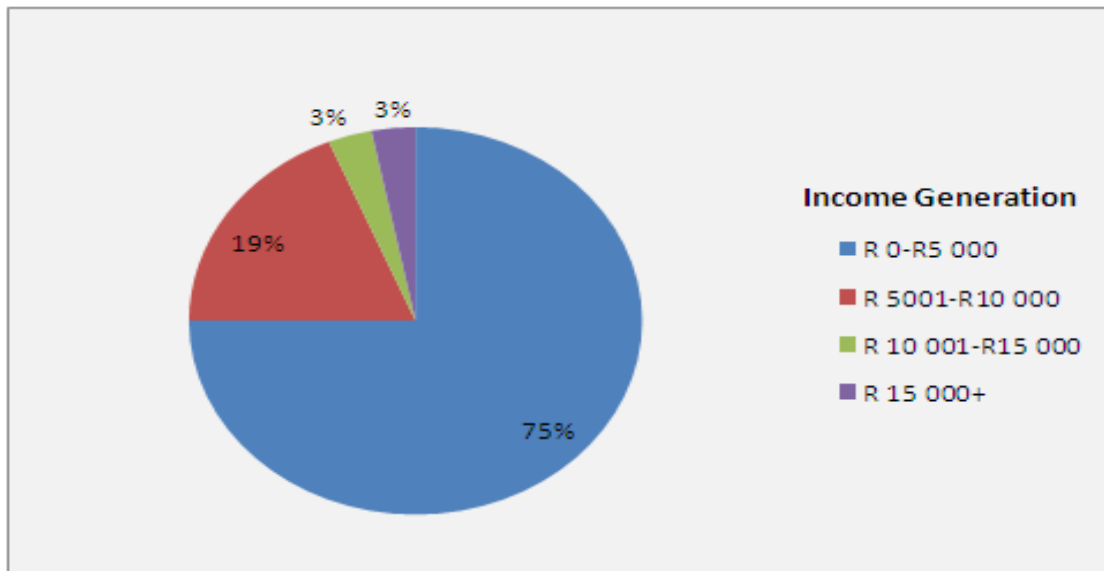
development of an area. The study has revealed that on-site consumption alcohol outlets are the only source of income for the households that own and operate them. Table 5-5 and Figure 5-9 below show the distribution of income generation for on-site consumption alcohol outlets in Emjindini Townships per group.

Table 5-5: Monthly income generated by owners of outlets

Income Generated	Respondents
R 0-R5 000	72
R 5001-R10 000	18
R 10 001-R15 000	3
R 15 000+	3
Total	96

Source: Own construction, 2013

Figure 5-9: Monthly income generated by owners of outlets



Source: Own construction, 2013

The data presented above confirms that on-site consumption alcohol outlets, though they are mostly associated with amenity effects, are a sector of the economy for income generation in particular for the poor. Figure 5-9 precisely indicates that 75% of the outlets generate a monthly income of between R0 and R 5 000 while 19% of the outlets generates a monthly income of between R 5 001 and R 10 000. Lastly, 3 % of these outlets either generates a monthly income of between R10 0001 and R15 000 or R 15 000+. The higher percentage of outlets that generate income of R0 and R 5 000 may be associated with the competition that is presented by the high density of on-site consumption alcohol

outlets. Nonetheless, the income generation factor does not justify the density of 1 on-site consumption alcohol outlet for every 263 people in Emjindini Townships. It is the opinion of the researcher that the existing density of these outlets in the study area is significant.

The problem of regulation, land use management and enforcement is evident and a cause for concern in Emjindini Townships.

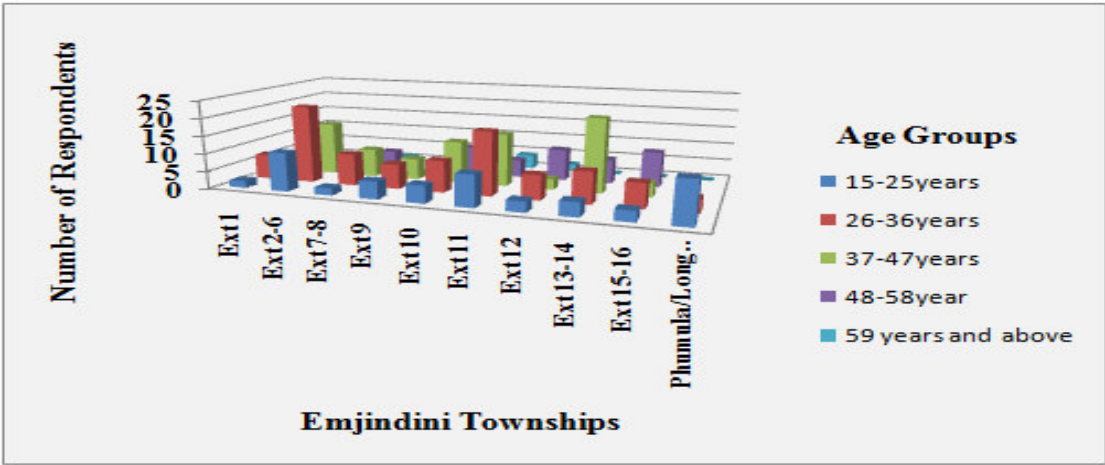
5.3 The impact of on-site consumption outlets

This section presents the impact of on-site consumption alcohol outlets on the compatibility of land uses in residential areas. In this section, the demographic profile of the respondents (households) is presented in terms of age group, education and employment status. Ultimately, the impact is presented in terms of acceptance level in order to define compatibility in line with the utilitarian perspective. The impact variables evaluated include criminal activities, social and moral problems, noise, odour, and accessibility. This impact has been considered in terms of acceptance level during the day and at the night.

5.3.1 Demography of respondents

A total of 300 questionnaires were proportionally distributed and administered to households within the study area. Thirty three percent of the questionnaires were distributed to households in the age group of those between 26-36 years while 29 % of the questionnaires were distributed and administered to households in the age group of between 37-47 years. Only 3% of the questionnaires were administered to households in the age group of 59 years and above. The race of all respondents is considered as Black or African. Furthermore, fifty five percent (55%) of the respondents are females while 45% represent males. The figure below demonstrates the distribution of age groups for the households' (respondents) who participated in the study.

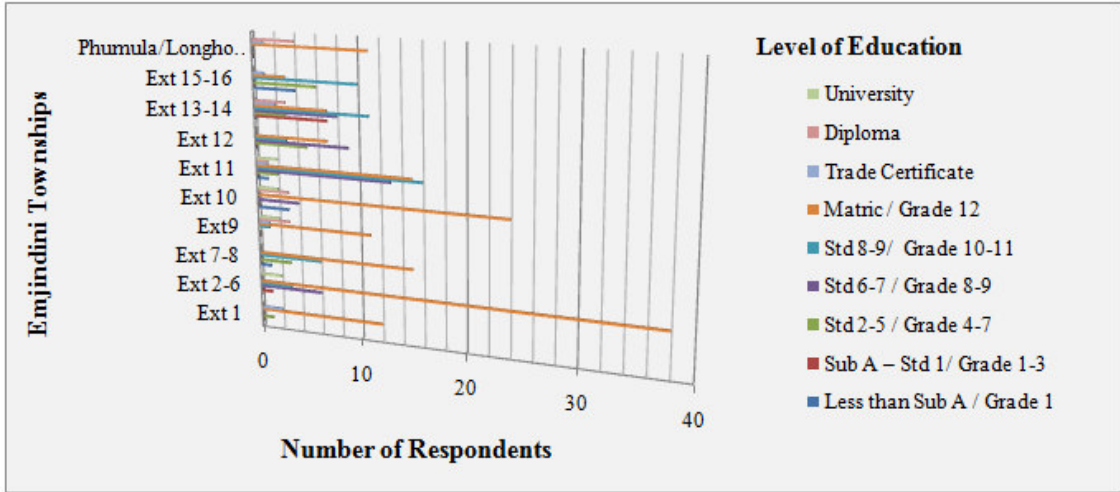
Figure 5-10: Age group distribution of households



Source: Own construction, 2013

The figure below evinces that a significant proportion of the household have matric or grade 12. The Census 2011 has presented that the rate of higher education level has improved between 1996 and 2011 from 16.17% to 32.37% in the Umjindi area of jurisdiction.

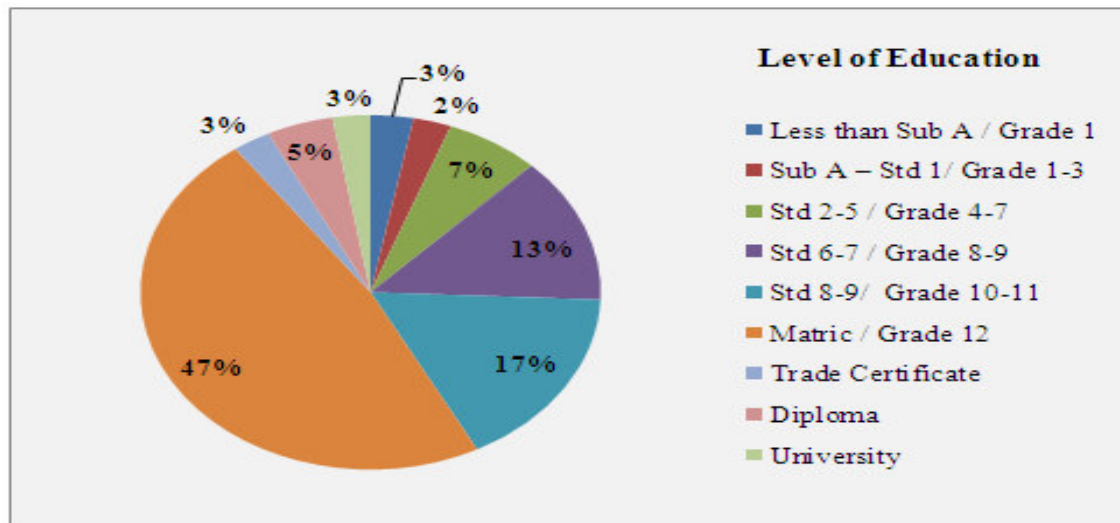
Figure 5-11: Level of education of study households



Source: Own construction, 2013

The figure below shows that on average, 11% of the household in the Emjindini Townships have higher education qualifications that include university degrees, diplomas and trade certificates. The lower rate of higher education may be attributed to the socioeconomic status of these townships which is predominantly low with the exception of other townships which falls in the medium income category.

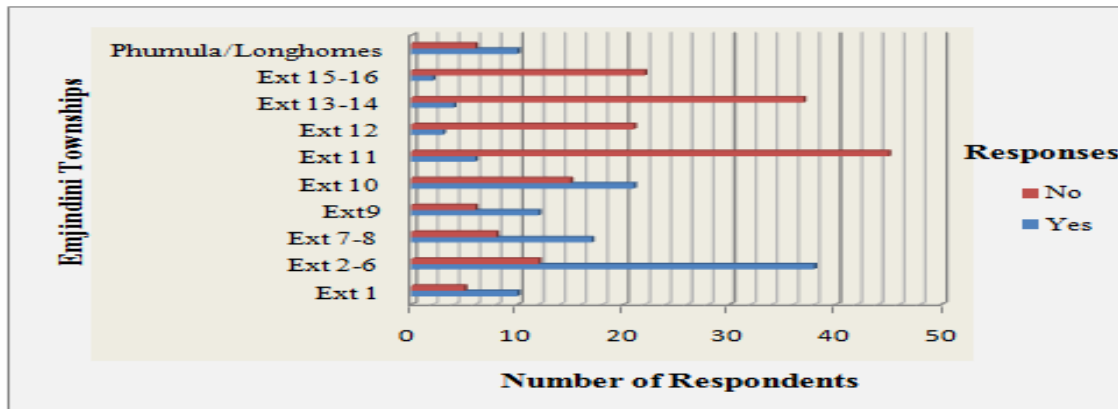
Figure 5-12: Percentage distribution of education level



Source: Own construction, 2013

In addition, startlingly, the study revealed that although the Emjindini Extension 11 Township has a significant density of on-site consumption alcohol outlets, 88% of the respondents in the township do not consume alcohol. It is however believed that a sample with a higher number of respondents in Emjindini Extension 11 Township may reveal different results. Conversely, the Emjindini Extension 10 Township which also has a higher density of on-site consumption alcohol outlets is identified with approximately 58% people that consume alcohol. It is further noted in the study that the townships of middle socioeconomic status have a significant proportion of respondents that consume alcohol yet they are characterised by an insignificant number of alcohol outlets. The figure below (Figure 5-13) illustrates the distribution of responses on alcohol consumption. Overall, there is a mean of 0.41 for respondents who consume alcohol while there is a mean of 0.52 for respondents who are non-alcoholic. Therefore, there is a variance of 0.17 (mean) between the households that consume alcohol and those that are non-alcoholic.

Figure 5-13: Alcohol consumption level of households



Source: Own construction, 2013

5.3.2 Crime associated impacts

The crime associated impacts that are considered in this section include the acceptance level of impact in relation to the areas of proximity to alcohol outlets and rape, burglary, assault, hijacking and robbery. The level of these impacts are evaluated for daytime and night-time effects, for both low (high density of alcohol outlets) and medium (low density of alcohol outlets) socioeconomic status townships of the study area. The overall crime statistics of the Umjindi Municipal area of jurisdiction are hereby presented.

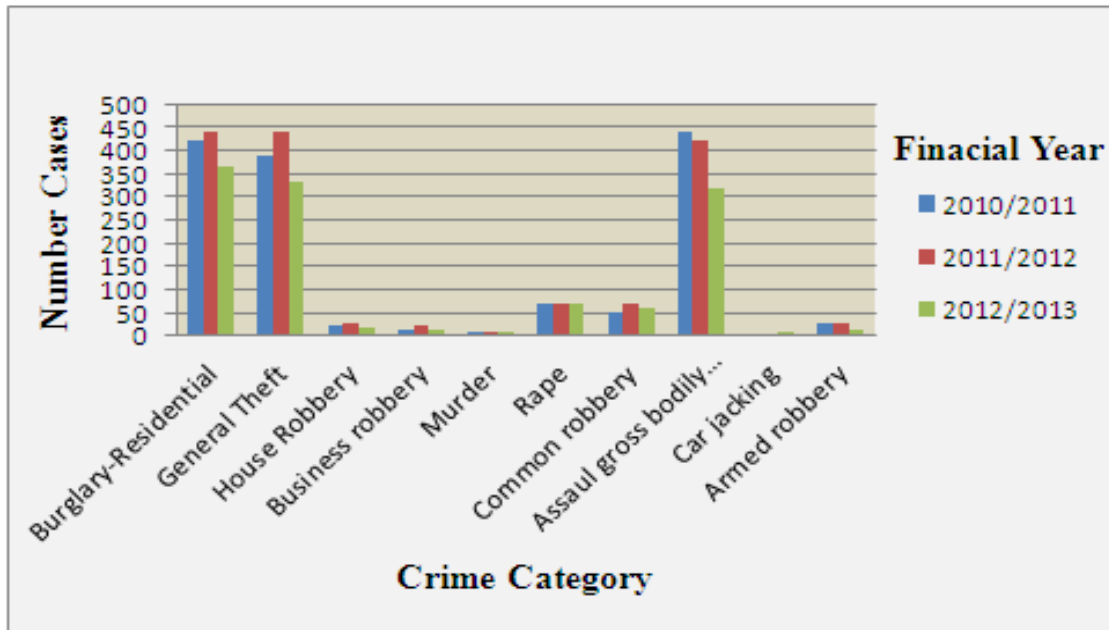
Table 5-6: Barberton crime statistics for 3 financial years

Crime Category	2010/2011	2011/2012	2012/2013	Total
Burglary-Residential	419	438	363	1220
General Theft	390	438	331	1159
House Robbery	21	26	18	65
Business robbery	11	24	15	50
Murder	8	9	9	26
Rape	68	71	67	206
Common robbery	52	71	59	182
Assault gross bodily harm	438	423	320	1181
Car jacking	5	4	9	18
Armed robbery	25	27	15	67
Total	1437	1531	1206	4174

Source: Barberton SAPS, 2013

Table 5-6 and Figure 5-14 present the crime statistics of the municipality represented by Barberton as the main town.

Figure 5-14: Barberton crime statistics for 3 financial years



Source: Barberton SAPS, 2013

The above results expose the fact that crime has increased by a mean of 0.02 in the financial year 2011/2012 when compared to the financial year of 2010/2011. Furthermore, the results show that in the financial year 2012/2013 crime also decreased by the mean 0.03 when compared to the financial year of 2011/2012. In terms of the statistics, assault, burglary, and theft are identified as the most prevalent problematic criminal activities in the jurisdiction area of the Umjindi Local Municipality.

5.3.2.1 Low socioeconomic status townships

The Emjindini Extension 11 Township is considered as a low socioeconomic status area. In literature, it is argued that low socioeconomic status areas are correlated with the high density of alcohol outlets and higher rates of amenity effects. The table below presents the acceptance level of crime in the aforementioned township during the day.

Table 5-7: Crime impact in extension 11 Township (during the day)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	0	0	5	10	46	90
Burglary	0	0	30	59	4	8	6	11	11	22
Assault	0	0	0	0	0	0	1	2	50	58
Hijack	0	0	0	0	0	0	0	0	0	0
Robbery	0	0	0	0	4	8	0	0	47	92

Source: Own construction, 2013

It is clearly shown in the table that there is high acceptance level of crime during the day in all crime categories with the exception of burglary which is least acceptable by 59% (on the average). On the contrary, Table 5-8 indicates that during the night in Emjindini Extension 11 Township, on the average, there is 100% of unacceptable level of impact for robbery and assault. Furthermore, it is clear from the table that at night in this township there is also 96% unacceptable level of impact for burglary.

Table 5-8: Crime impact in extension 11 Township (during the night)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	7	0	44	0	0	0
Burglary	49	96	2	4	0	0	0	0	0	0
Assault	51	100	0	0	0	0	0	0	0	0
Hijack	12	26	39	76	0	0	0	0	0	0
Robbery	51	100	0	0	4	8	0	0	0	0

Source: Own construction, 2013

Table 5-9 present results of additional three townships considered as low socioeconomic status areas with significant density of alcohol outlets. The results presented, particularly on the level of acceptance (highly) for crime impact during the day, are similar to those of the Emjindini Extension 11 Township.

Table 5-9: Crime impact in Ext 10, 13 and 14 Townships (during the day)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	0	0	2	2.5	75	97.4
Burglary	0	0	1	1.3	6	8	9	12	61	79
Assault	0	0	12	16	28	36	10	13	27	35
Hijack	0	0	0	0	0	0	0	0	77	100
Robbery	3	4	11	14	19	25	14	18	30	39

Source: Own construction, 2013

It is clear from the table below that during the night the impact associated with crime is either not acceptable at all or least acceptable by the community.

Table 5-10: Crime impact in Ext 10, 13 and 14 Townships (during the night)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	7	9.1	1	1.3	7	9.1	28	36.3	34	44
Burglary	14	18	34	44	24	31	3	4	2	3
Assault	20	26	13	17	37	48	6	8	1	1.3
Hijack	0	0	0	0	5	6.5	2	2.5	70	91
Robbery	3	4	45	58	17	22	6	8	6	8

Source: Own construction, 2013

On the average, there is 11.4% unacceptable level, 24% least acceptance level, 23.3% neutral acceptance level, 11.8% acceptance level and 29.5 highly acceptance level of crime impact associated with on-site consumption alcohol outlets during the night in these townships. Assault, robbery and burglary are considered to be the most unaccepted impact of crime in Emjindini Extension 10, 11, 12, 13 and 14 Townships. It is worth mentioning that it has not yet been proven internationally or otherwise whether the density of on-site consumption alcohol outlets is the sole cause of crime. The crime in these areas may be associated with the behaviour of individuals. Results show that crime is experienced significantly during the night which subsequently renders these township high risk areas and without the good quality of life at night.

5.3.2.2 Middle socioeconomic status townships

Emjindini Extensions 1-6 Townships are considered as middle socioeconomic status areas (low density of alcohol outlets). It is indicated in Table 5-11 that on the average, 77% of the respondents highly accept, 10% accept, 12% least accept, 0% do not accept and 1% least accept the level of crime impact in these townships during the day.

Table 5-11: Crime impact in extensions 1-6 Townships (during the day)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	0	0	0	0	65	100
Burglary	0	0	0	0	2	3	10	15.4	53	81.5
Assault	0	0	3	4.6	35	53.8	16	24.6	11	16.9
Hijack	0	0	0	0	0	0	0	0	65	100
Robbery	0	0	0	0	2	3	7	11	56	86

Source: Own construction, 2013

On the other hand, 3.8 % of the respondents do not accept the level of crime impact (during the night) in relation to the existence of alcohol outlets while 16.3% least accept the level of crime impact during the night. Table 5-12 shows the crime impact in Emjindini Extension 1-6 Townships during the night.

Table 5-12: Crime impact in extensions 1-6 Township (during the night)

Variable: Criminal Activities	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Rape	0	0	0	0	15	23	25	38.5	25	38.5
Burglary	5	8	33	50.7	20	30.7	2	3	5	8
Assault	2	3	9	13.8	40	61.5	0	0	14	21.5
Hijack	0	0	0	0	8	12.3	10	15.4	47	72.3
Robbery	5	8	11	17	26	40	23	35	0	0

Source: Own construction, 2013

It is evident from Table 5-12 that on the average, a maximum of 33.5% households hold a neutral view on the acceptance level of crime impact in the residential areas of these townships on nights. Moreover, a further 28% of the households have no problem with the level of crime impact during the night. In comparison with the middle and the low socioeconomic status townships, results have shown that in both areas the impact of crime is highly accepted during the day. However, it is clear that during the night a high proportion of respondents are not accepting the level of crime impact in the low socioeconomic status townships hence a high proportion of respondents (28%) highly accept the level of crime impact during the night in the middle socioeconomic status townships. It can be highlighted that the low socioeconomic areas with a significant proportion of on-site consumption alcohol outlets (high density) have a correlation with the highly unacceptable level of crime impact associated with alcohol outlets. Therefore, it can be concluded that the high density of on-site consumption alcohol outlets has a positive correlation with crime. This is mainly because the high “unacceptable level” of crime impact is experienced in areas with the high density of on-site consumption alcohol outlets.

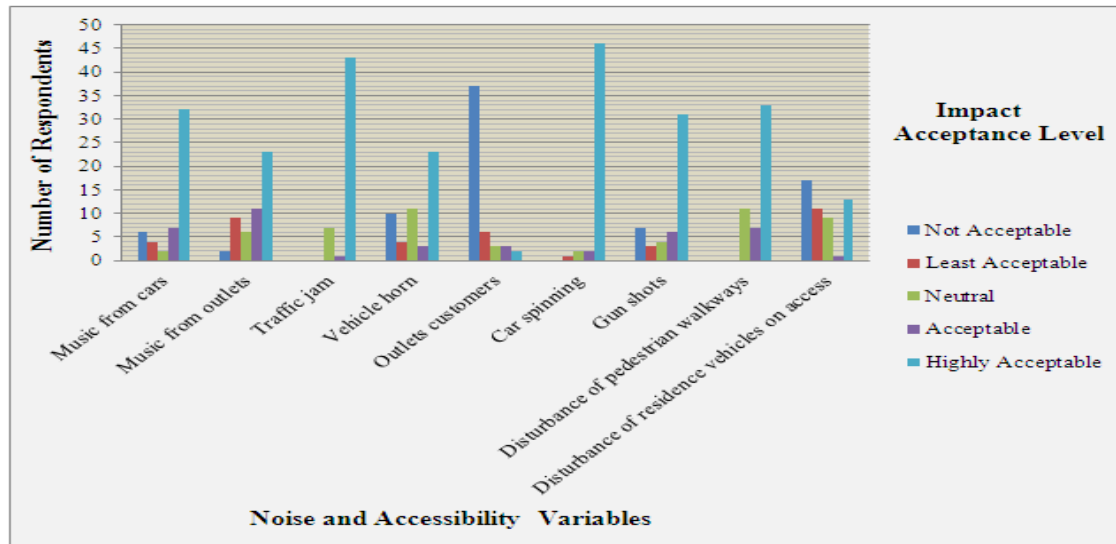
The results presented on the crime impacts are in line with the crime statistics of Barberton which identify burglary, assault and theft as the main problematic crime categories in the study area. It is clear in the results above that burglary assault and robbery are the main crime activities which are significantly unacceptable in the areas with higher density of on-site consumption alcohol outlets. SAPS Barberton argues that most of these crimes happen during the night and the victims (specifically those of assault and robbery) are victimised when they are on their way back home from these on-site consumption alcohol outlets.

5.3.3 Noise and accessibility associated impact

The impact that is considered in this section is based on the acceptance level of noise from alcohol outlets and accessibility problems resulting from the operations of on-site consumption alcohol outlets. The level of this impact is considered in the terms of during the day and during the night for both low and medium socioeconomic status townships of the study area.

5.3.3.1 Low socioeconomic status townships

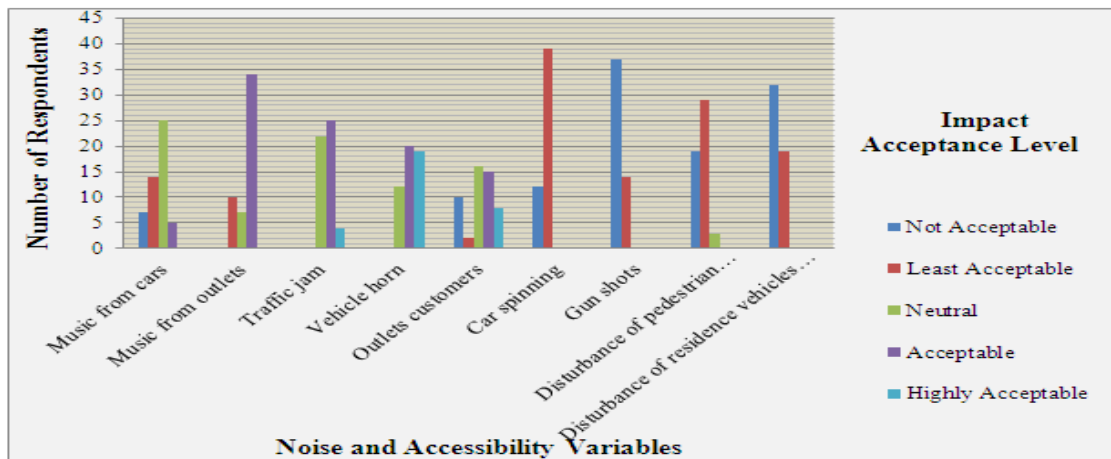
Figure 5-15: Noise and accessibility impact in Ext 11 Township (during the day)



Source: Own construction, 2013

The above figure clearly shows that on the average, there is high number of respondents that can tolerate the level of noise (54%) and accessibility impact during the day in Emjindini Extension 11 Township. Figure 5-16 below presents that on the average, the significance of unacceptable (19%) and least acceptable (28 %) levels of noise and accessibility impact during the night in the township are experienced in the variable of gun shots, car spinning, disturbance of pedestrian walkways and disturbance of access for residence vehicles. The figure below can be interpreted as revealing that during the night in Emjindini Extension 11 Township, there is an acceptance impact level of 22% acceptance level, 12% highly acceptance level and 19% neutral acceptance level on the average.

Figure 5-16: Noise and accessibility impacts in Ext 11 Township (during the night)



Source: Own construction, 2013

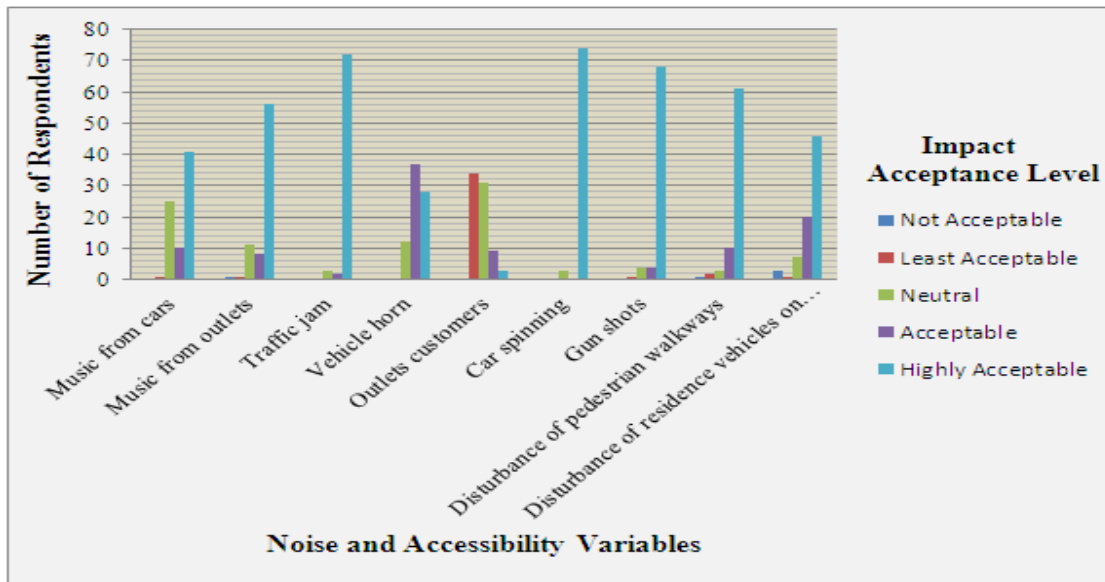
The results presented in Table 5-13 and Figure 5-17 indicate that the Emjindini Extension 10, 13 and 14 Townships share the same results of acceptance level of noise and accessibility impact during the day with the Emjindini Extension 11 Township although with different levels of tolerance (or acceptance).

Table 5-13: Noise and accessibility impact in Ext 10, 13 and 14 Townships (during the day)

Variable: Noise and accessibility	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Music from cars	0	0	1	1.3	25	32.5	10	13	41	53
Music from outlets	1	1.3	1	1.3	11	14.2	8	10.4	56	73
Traffic jam	0	0	0	0	3	4	2	3	72	93
Vehicle horn	0	0	0	0	12	15.5	37	48	28	36.4
Outlets customers	0	0	34	44	31	40	9	12	3	4
Car spinning	0	0	0	0	3	4	0	0	74	96
Gun shots	0	0	1	1.3	4	5.2	4	5.2	68	88
Disturbance of pedestrian walkways	1	1.3	2	3	3	4	10	13	61	79
Disturbance of residence vehicles on access	3	4	1	1.3	7	9	20	26	46	60

Source: Own construction, 2013

Figure 5-17: Noise and accessibility impact in Ext 10 and 13-14 Townships (during the day)



Source: Own construction, 2013

Furthermore, these townships on the average have 65% highly acceptance levels of noise and accessibility impact during the day. It is presented in Table 5-14 and Figure 5-18 that on the average only 8% of the respondents confirmed noise and accessibility impact level as not acceptable during the night. Although these townships are characterised by a high density of alcohol outlets, the noise impact is experienced from outlets' customers (by 86% unacceptable level) on their way home in particular in the early hours of the morning.

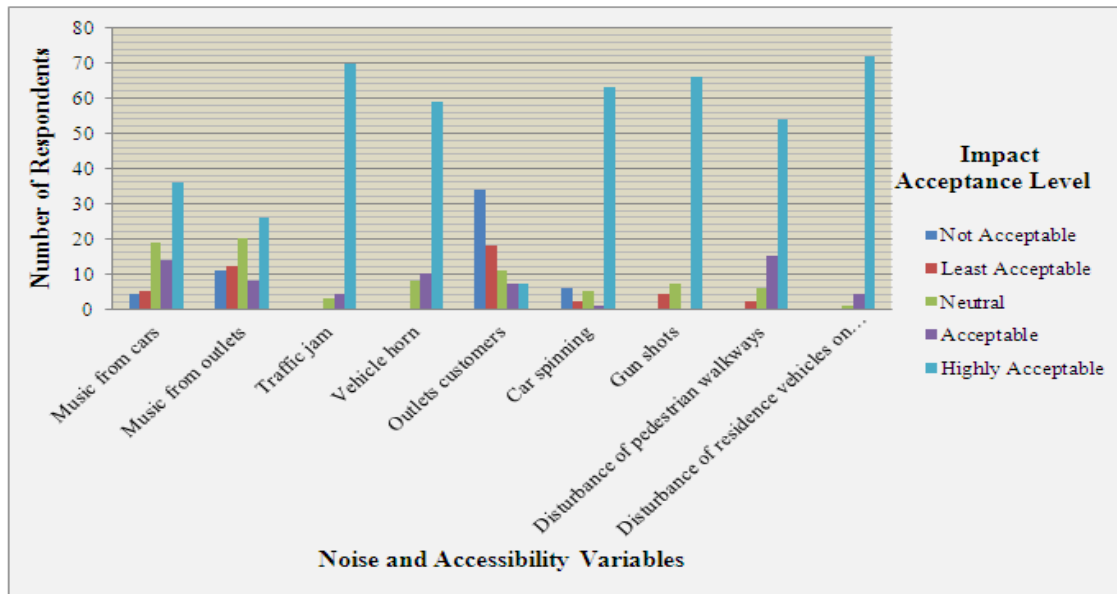
Table 5-14: Noise and accessibility impact in Ext 10 and 13-14 Townships (during the night)

Variable: Noise and accessibility	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Music from cars	3	4	5	6	19	25	14	18	36	47
Music from outlets	11	14	12	16	20	26	8	10	26	34
Traffic jam	0	0	0	0	3	4	4	5.2	70	91
Vehicle horn	0	0	0	0	8	10	10	13	59	77
Outlets customers	34	44	18	23.4	11	14	7	9.1	7	9.1
Car spinning	6	8	2	3	5	6	1	1.3	63	82
Gun shots	0	0	4	5.2	7	9	0	0	66	86
Disturbance of pedestrian walkways	0	0	2	3	6	8	15	19	54	70
Disturbance of residence vehicles on access	0	0	0	0	1	1.3	4	5.2	72	93

Source: Own construction, 2013

It is clear from the table that on the average, there is also a 65% highly acceptance level of noise and accessibility impact in Emjindini Extension 10, 13 and 14 Townships during the night. The results further show that there is an average of 6.3% least acceptance level, 11.3% neutral acceptance level and 9% acceptance level of these impacts during the night in the mentioned townships. In the comparison of these townships and Emjindini Extension 11 Township it is apparent that the more the density the least the acceptability of noise and accessibility related impact.

Figure 5-18: Noise and accessibility impact in Ext 10 and 13-14 Townships (during the night)



Source: Own construction, 2013

5.3.3.2 Middle socioeconomic status townships

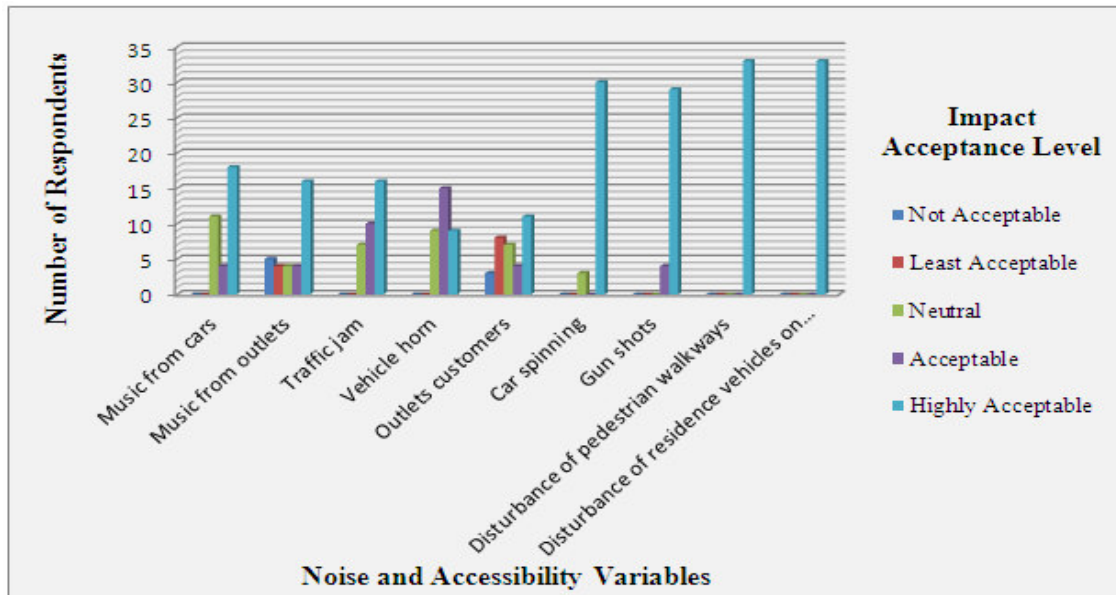
Table 5-15: Noise and accessibility impact in Ext 1-6 Townships (during the day)

Variable: Noise and accessibility	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Music from cars	0	0	2	3	24	37	15	23	24	37
Music from outlets	5	8	11	17	10	15	9	14	30	46
Traffic jam	0	0	0	0	14	21.5	17	26	34	52.3
Vehicle horn	0	0	4	6	17	26	28	43	16	25
Outlets customers	3	4.6	19	29	16	25	14	21.5	13	20
Car spinning	0	0	0	0	4	6	10	15.4	51	78.5
Gun shots	0	0	0	0	1	1.5	6	9.2	58	89.2
Disturbance of pedestrian walkways	0	0	5	8	6	9.2	3	4.6	51	78.5
Disturbance of residence vehicles on access	0	0	0	0	0	0	0	0	65	100

Source: Own construction, 2013

The above table and Figure 5-19 below show that in Emjindini Extension 1-6 Townships during the day on the average, there is a 1.4% unacceptable level of noise and accessibility impact while there is a 58.5% highly acceptance level of impact. The results further show that, during the day, on the average, there is a further 17.4% acceptance level of noise and accessibility impact in these townships.

Figure 5-19: Noise and accessibility impact in Ext 1-6 Townships (during the day)



Source: Own construction, 2013

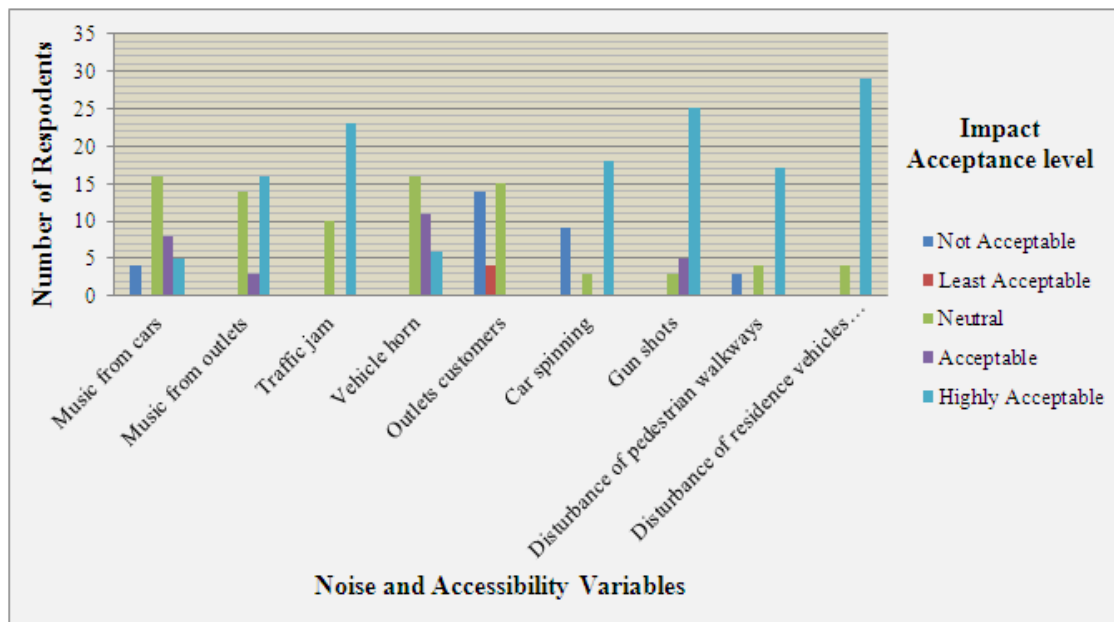
Table 5-16 and Figure 5-20 below present that during the night, on the average, there is 50% highly acceptance level and 10% acceptance level of noise and accessibility impact in Emjindini Extension 1-6 Townships. On the other hand 24% of respondents find the impact neutral during the night. In the comparison of acceptance levels during the day and during the night in Emjindini Extension 1-6 Townships, it is clear from the results that there is only a variance of 8.5% (on the average) on the highly acceptance level.

Table 5-16: Noise and accessibility impacts in Ext 1-6 Townships (during the night)

Variable: Noise and accessibility	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Music from cars	8	12.3	3	4.6	27	41.5	13	20	14	21.5
Music from outlets	6	9.2	0	0	26	40	6	9.2	27	41.5
Traffic jam	6	9.2	0	0	10	15.4	0	0	49	75.4
Vehicle horn	8	12.3	0	0	23	35.4	18	27.6	16	24.6
Outlets customers	26	40	9	14	30	46	0	0	0	0
Car spinning	15	23	3	4.6	6	9.2	0	0	41	63
Gun shots	0	0	0	0	5	8	15	23	45	69
Disturbance of pedestrian walkways	3	4.6	9	14	7	10.7	5	8	41	63
Disturbance of residence vehicles on access	0	0	0	0	6	9.2	0	0	59	90.7

Source: Own construction, 2013

Figure 5-20: Noise and accessibility impacts in Ext 1-6 Townships (during the night)



Source: Own construction, 2013

The above results present that during the day the impact of noise and accessibility are highly accepted in both low and middle socioeconomic status (LSS) townships. However; during the night this impact is highly accepted only in the middle socioeconomic status (LSS) townships. During the night, on the average, approximately 38% of respondents in the low socioeconomic status (LSS) townships highly accept the impact levels of noise and accessibility while 50% of the middle socioeconomic status township highly accepts the impacts which therefore present a variance of 12% when compared to the results of the LSS.

5.3.4 Odour, social and moral associated impacts

5.3.4.1 Low socioeconomic status townships

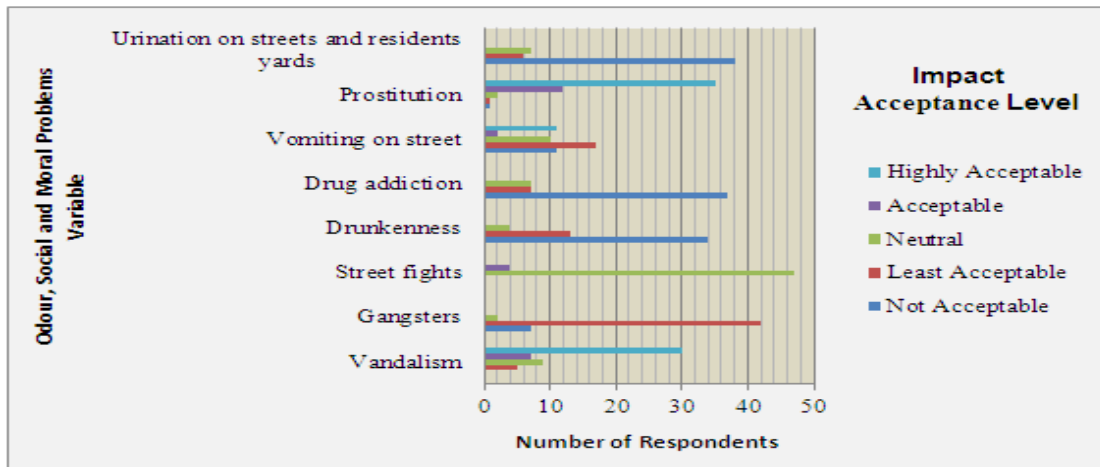
Table 5-17: Odour, social and moral impact in Ext 11 Township (during the day)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	0	0	5	10	9	17	7	14	30	59
Gangsters	7	14	42	82	2	4	0	0	0	0
Street fights	0	0	0	0	47	92	4	8	0	0
Drunkenness	34	67	13	25	4	8	0	0	0	0
Drug addiction	37	72	7	14	7	14	0	0	0	0
Vomiting on street	11	21.5	17	33	10	20	2	4	11	21.5
Prostitution	1	2	1	2	2	4	12	23	35	69
Urination on streets and residents yards	38	74	6	12	7	14	0	0	0	0

Source: Own construction, 2013

The above shows that, on average, 24% of the respondents in Emjindini Extension 11 Township are not satisfied with the level of impact of odour, social and moral problems during the day. On the other hand, 23.3% account for the impact level of least acceptable. Figure 5-21 below graphically presents the results.

Figure 5-21: Odour, social and moral impact in Ext 11 Township (during the day)



Source: Own construction, 2013

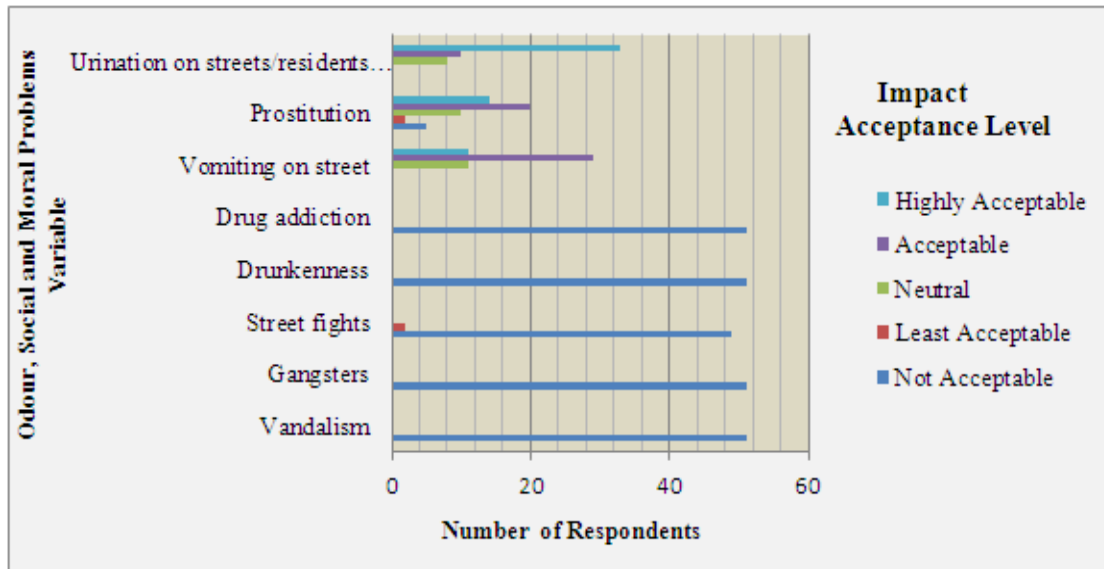
It is revealed by the results that on average there is a 17% highly acceptance level of odour, social and moral problems related impact in the Emjindini Extension 11 Township during the day. The study further revealed that in the same township and on the same impact, on averaged, there is a 22% neutral acceptance level. The Table 5-18 and Figure 5-22 below show the results of impact levels for odour, social and moral problems during the night in Emjindini Extension 11 Township.

Table 5-18: Odour, social and moral impact in Ext 11 Township (during the night)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	51	100	0	0	0	0	0	0	0	0
Gangsters	51	100	0	0	0	0	0	0	0	0
Street fights	49	96	2	4	0	0	0	0	0	0
Drunkenness	51	100	0	0	0	0	0	0	0	0
Drug addiction	51	100	0	0	0	0	0	0	0	0
Vomiting on street	0	0	0	0	11	21.5	29	0	11	21.5
Prostitution	5	10	2	4	10	20	20	39	14	27
Urination on streets/residents yards	0	0	0	0	8	15.6	10	20	33	64.7

Source: Own construction, 2013

Figure 5-22: Odour, social and moral impact in Ext 11 Township (during the night)



Source: Own construction, 2013

The results demonstrate that on average there is a 63% of unacceptable level of odour, social and moral problems related impact during the night. The significant proportion of the unacceptable levels in Emjindini Extension 11 Township may be associated with the high density of on-site consumption alcohol outlet in the township.

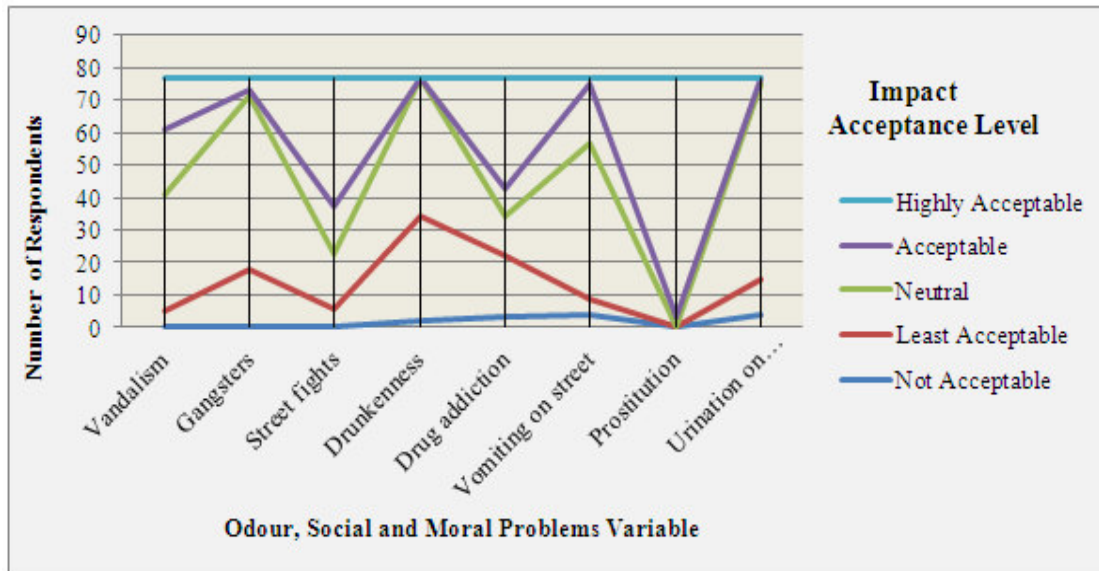
Table 5-19: Odour, social and moral impact in Ext 10 and 13-14 Townships (during the day)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	0	0	5	6.5	36	47	20	26	16	21
Gangsters	0	0	18	23	53	69	2	2.6	4	5.2
Street fights	0	0	6	8	17	22	14	18	40	52
Drunkenness	2	2.6	32	41.5	43	56	0	0	0	0
Drug addiction	3	4	19	24.6	12	15.5	9	12	34	44
Vomiting on street	4	5.2	5	6.5	48	62.3	18	23.4	2	2.6
Prostitution	0	0	0	0	0	0	3	4	74	96
Urination on streets/residents yards	4	5.2	11	14.3	60	78	2	2.6	0	0

Source: Own construction, 2013

The above table presents results of impact acceptance level for odour, social and moral problems in Emjindini Extension 10, 13 and 14 during the day. These townships combined are considered as second after Emjindini Extension 11 Township in relation to the density of alcohol outlets.

Figure 5-23: Odour, social and moral impact in Ext 10 and 13-14 Townships (during the day)



Source: Own construction, 2013

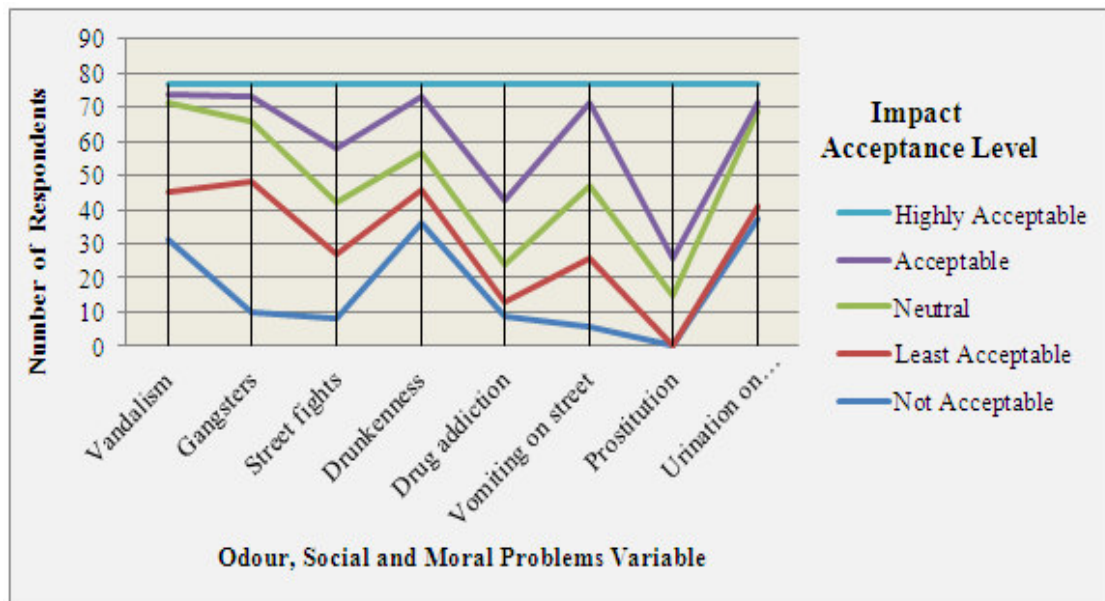
It is apparent from Table 5-19 and Figure 5-23 that these townships have a high acceptance level (or tolerance) of odour, social and moral problems related impact during the day. These townships have an average of 30% (highly) acceptable (tolerance) level of these impacts which is greater by 13% when compared with the 17% highly acceptance level in Emjindini Extension 11 Township during the day.

Table 5-20: Odour, social and moral impact in Ext 10 and 13-14 Townships (during the night)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	31	40	14	18	26	34	3	4	3	4
Gangsters	10	13	38	49.3	18	23.4	7	9.1	4	5.2
Street fights	8	10	19	24.8	15	19.5	16	21	19	24.8
Drunkenness	36	47	10	19	11	14	16	21	4	5.2
Drug addiction	9	12	4	5.2	11	14	19	24.8	34	44
Vomiting on street	6	8	20	26	21	27	24	31	6	8
Prostitution	0	0	0	0	15	19.5	11	14	51	66.2
Urination on streets/residents yards	37	48	4	5.2	28	36.4	2	2.6	6	8

Source: Own construction, 2013

Figure 5-24: Odour, social and moral impact in Ext 10 and 13-14 Townships (during the night)



Source: Own construction, 2013

On the other hand, Table 5-20 and Figure 5-24 above present the results of impact acceptance level for odour, social and moral problems in Emjindini Extension 10, 13 and 14 Townships during the night.

On average, during the night in all categories combined, the least acceptable impact level for odour, social and moral problems in these townships is 46% followed the 22.3% of unacceptable level. There is only 21 % average of highly and neutral acceptance level of this impact during the night Emjindini Extension 10, 13 and 14 Townships. The results of unacceptable impact level for odour, social and moral problems during the night in Emjindini Extension 10, 13 and 14 Townships are better off when compared to those of Emjindini Extension 11 Township. The results present that, the impact of odour, social and moral related problems in low socioeconomic areas is mostly experienced during the night and is disproportionately significant in areas with the high density of on-site consumption alcohol outlets.

5.3.4.2 Middle socioeconomic status townships

This section presents the impact acceptance levels of odour, social and moral related problems in areas identified as middle socioeconomic status with a limited number of on-site consumption outlets. The results aid in providing the comparison of results between the area of low and middle socioeconomic status.

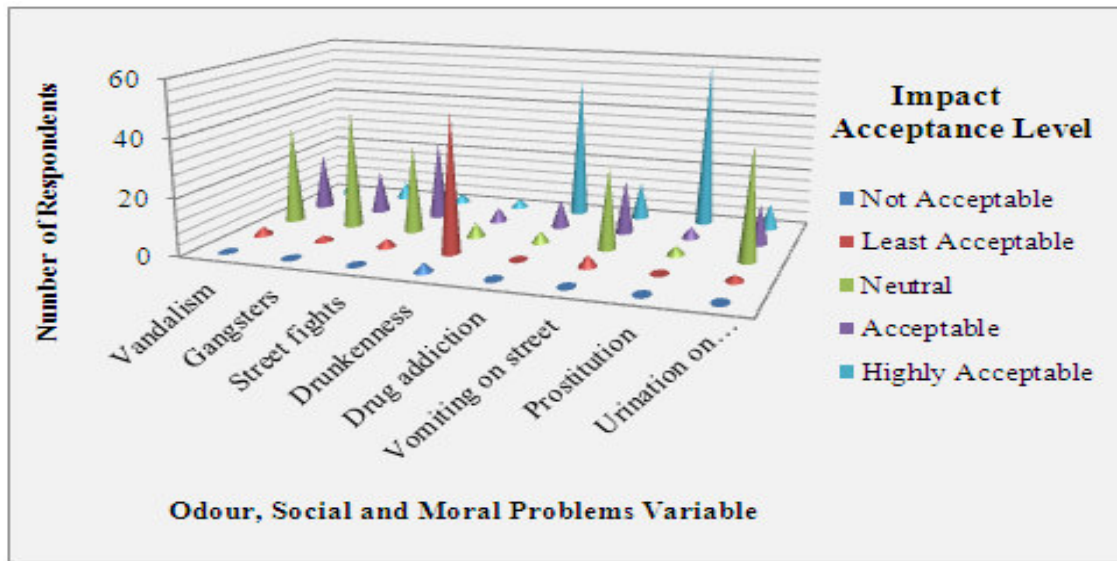
Table 5-21: Odour, social and moral impact in Ext 1-6 Townships (during the day)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	0	0	3	4.6	35	53.8	20	31	7	11
Gangsters	0	0	2	3	42	65	15	23	6	9.2
Street fights	0	0	3	4.6	31	48	28	43	3	4.6
Drunkenness	3	4.6	49	75	5	8	5	8	3	4.6
Drug addiction	0	0	0	0	4	6	10	15.4	51	78.5
Vomiting on street	0	0	4	6	29	45	19	29	13	20
Prostitution	0	0	0	0	3	4.6	4	6	58	89.2
Urination on streets/residents yards	0	0	2	3	40	61.5	14	21.5	9	14

Source: Own construction, 2013

Table 5-21 (above) and Figure 5-25 (below) present the results of impact acceptance level of odour, social and moral related problems in Emjindini Extension 1-6 Townships during the day. On the overage, there is a 29% of highly acceptance level, 22% acceptance level, 36.5% neutral acceptance level, 12% least acceptance level and 0.5% unacceptable level of impact for odour, social and moral related problems during the day. It is clear that these townships as identified with limited density of alcohol outlets on the average have achieved an acceptable level of impact during the day. These results give a better picture when compared to those discussed for the areas with the LSS.

Figure 5-25: Odour, social and moral impact in Ext 1-6 Townships (during the day)



Source: Own construction, 2013

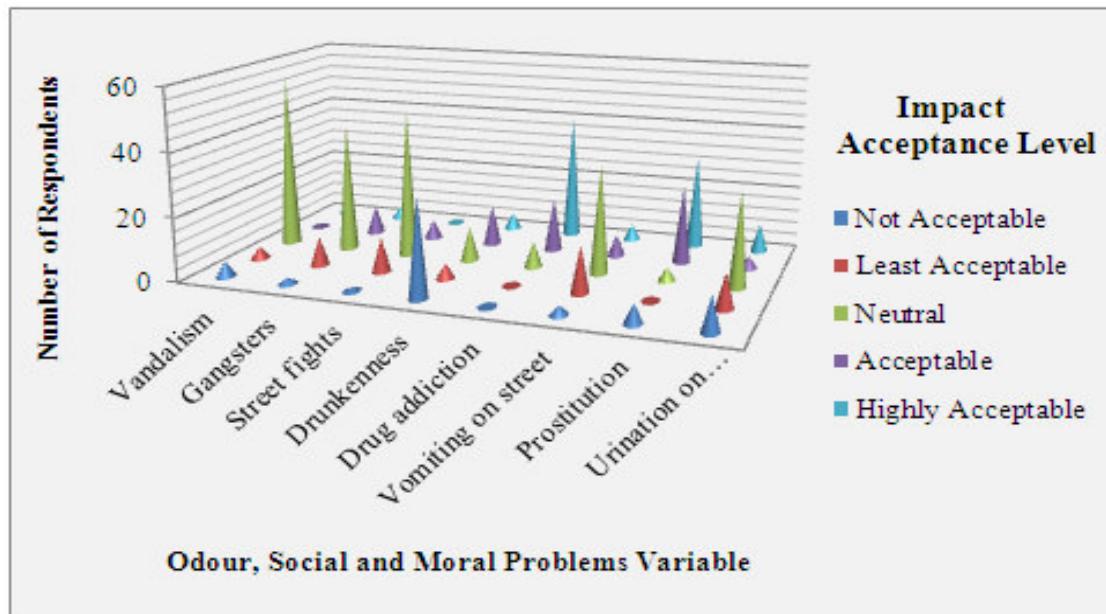
On the other hand, on the average of impact acceptance level in all categories of odour, social and moral related problems in these townships, there is a there is a 18 % of highly acceptance level, 15.6 % acceptance level, 44% neutral acceptance level, 11% least acceptance level and 11.4% unacceptable level during the night as presented in Table 5-22 and Figure 5-26 below.

Table 5-22: Odour, social and moral impact in Ext 1-6 Townships (during the night)

Variable: Odour, social and moral problems	Level of Acceptance									
	Not Acceptable		Least Acceptable		Neutral		Acceptable		Highly Acceptable	
	F	%	F	%	F	%	F	%	F	%
Vandalism	5	8	4	6	56	86	0	0	0	0
Gangsters	2	3	9	14	41	63	9	14	4	6
Street fights	1	1.5	11	17	47	72	6	9.2	0	0
Drunkenness	31	47.6	5	8	11	16.9	13	20	5	8
Drug addiction	0	0	0	0	8	12.3	17	26.1	40	61.5
Vomiting on street	3	4.6	15	23	35	53.8	7	10.7	5	8
Prostitution	6	9.2	0	0	4	6	25	38.5	30	46.1
Urination on streets/residents yards	11	17	11	17	30	46.1	4	6	9	14

Source: Own construction, 2013

Figure 5-26: Odour, social and moral impact in Ext 1-6 Townships (during the night)



Source: Own construction, 2013

In the comparison of these townships with townships in the low socioeconomic status areas, results showed that the impact of odour, social and moral related problems in these townships (Emjindini Extension 1-6) is acceptable with the results of the average of 11.4% unacceptable and 11% least

acceptable impact levels during the night. On the contrary, the Emjindini Extension 11 Township received 63% unacceptable level on the average while Emjindini Extension 10, 13 and 14 Townships received 46% least acceptable and 22.3% of unacceptable level during the night.

5.3.5 Cross comparison of impact acceptance (tolerance) levels

The study findings indicate that on-site consumption alcohol outlets are compatible in residential areas. The explanation of these results may be that most of the impacts are more “tolerable” OR acceptable during the day and mostly unacceptable during the night in particular, in areas where there is a higher density of on-site consumption alcohol outlets. The table below shows the comparison of impact acceptance levels during the night in Emjindini Extension 11 Township (with higher density of outlets) and Emjindini Extension 1-6 Townships (with lower density of impact).

Table 5-23: Cross comparison of impact acceptance levels during the night

Variable	Level of Impact Acceptance			
	Emjindini Ext 11 Township (high density of outlets)		Emjindini Ext 1-6 Townships (low density of outlets)	
	Impact Highly Acceptable Level	Impact Unacceptable Level	Impact Highly Acceptable Level	Impact Unacceptable Level
Crime Activities	0	163	91	12
Noise and accessibility	31	117	292	72
Odour, social and moral problems	58	258	93	59
Total	89	538	476	143

Source: Own construction, 2013

The above table MAY BE AN INDICATION that the Emjindini Extension 11 Township, as characterised by the significant proportion of on-site consumption alcohol outlets, has a higher proportion of responses (538) which confirms the level of ‘amenity’ effects associated with alcohol outlets as unacceptable during the night. On the other hand, the Emjindini Extension 1-6 Townships have a higher number of responses that consider these townships with a significant highly acceptable level of amenity effects associated with alcohol outlets during the night.

In line with the utilitarian perspective, the study reveals that there is a higher aggregate on the total number of responses that accepts the level of amenity effects during the day (in both low and high density of alcohol outlets townships). The above table shows that on the average, 48% of the unacceptable level in Emjindini Extension 11 Township is associated with the impacts of odour, social and morally related problems while 30% is related to crime activities and the remainder (22%) is associated with noise and accessibility problems. The higher percentages of the unacceptable level of impact of odour, social and moral related problems may be related to the behaviour of individuals when intoxicated. It can be concluded that during the night, the high density of on-site consumption alcohol outlets reduce the quality of life in residential neighbourhoods.

5.4 Recommended, preferred and practical guidelines

In order to obviate the profound effects associated with on-site consumption alcohol outlets in particular areas where such outlets abound, there is a need to adopt stringent control measures for on-site consumption alcohol outlets. This section discusses the concise and convincing guidelines that may be undertaken in policy making, regulation and enforcement.

5.4.1 Location of alcohol outlets

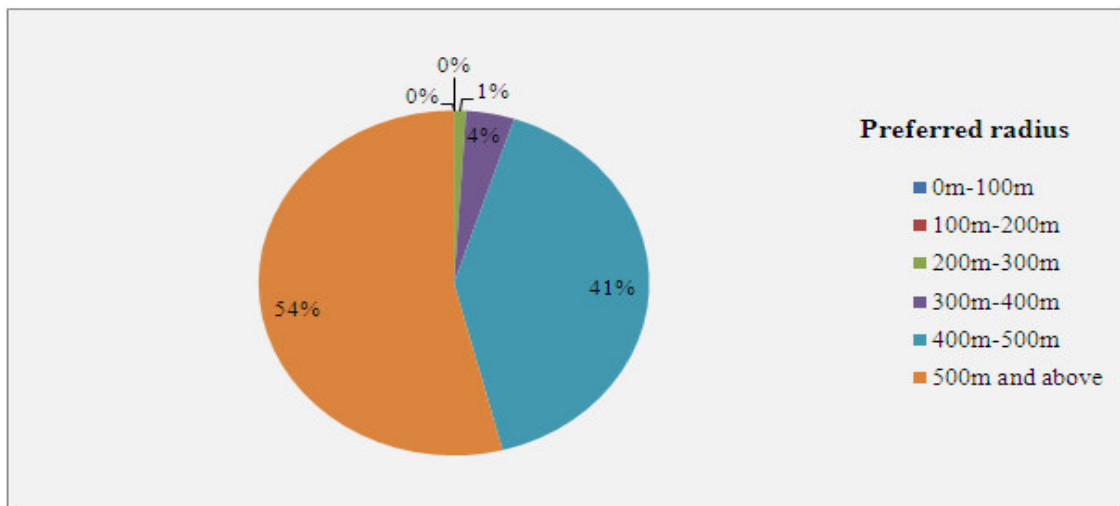
The location of on-site consumption alcohol outlets in residential areas in particular in the proximity of sensitive institutions requires regulations that would protect these institutions. These sensitive institutions are considered as including but not limited to religious and academic institutions, cemeteries and areas of high population concentration generally visited by the public which include amongst others **bus stations, taxi ranks, sports fields, public parks, tourist attractions and old age homes**. The location of on-site consumption alcohol outlets is preferred along major transportation routes and in areas identified by land use policies as commercial/business nodes. In residential areas, the recommended locations should be the corner stands or erven in particular along distributor road that would be able to carry the load of delivery trucks. Table 5-24 and Figure 5-25 below present the recommendations by households on the location (radius) of outlets in the proximity of sensitive institutions.

Table 5-24: Preferred location (radius) of outlets

Preferred distance	Respondents
0m-100m	0
100m-200m	0
200m-300m	3
300m-400m	12
400m-500m	123
500m and above	162
Total	300

Source: Own construction, 2013

Figure 5-27: Preferred location radius of outlets



Source: Own construction, 2013

It is apparent from the above Table 5-24 and Figure 5-27 that 54% of the households prefer a distance of 500m and above for the location of on-site consumption outlets in the proximity of sensitive institutions. Furthermore, Figure 5-27 shows that 41% of the respondents prefer a radius of between 300m and 400m. No respondent wants a location radius of between 0m and 200m. This clearly indicates that these outlets are unacceptable in the proximity of sensitive institutions. It is however of utmost importance for the radius to be defined in terms of the typology of the on-site consumption alcohol outlets and the density of dwelling units. The above preferred distance of between 300m and 500m may not be applicable to restaurants and accommodation facilities such as hotels. It is necessary that the determination of this buffer (in terms of radius) be made very clear in policy for all types of on-site consumption alcohol outlets as may be defined in law.

The limitation on the size of a property is also recommended as a guide for the location of these outlets. In this regard, an erf size of not less than 500 square meters may be consented for tavern establishment. It is therefore the recommendation of this study that the location of on-site consumption alcohol outlets, in particular taverns in residential areas in the proximity of sensitive institutions, be not less than a distance of 500m. In the application of the proposed radius, taverns are therefore defined as on-site consumption alcohol outlets in a residential area where alcohol is consumed in the premises with the exception of a restaurant and accommodation facilities such as a hotels, guest lodges and guest houses where alcohol is sold to guests only.

5.4.2 The proposed density of alcohol outlets

The study has revealed that liquor legislation has neither provisions nor guidelines for the density of alcohol outlets. It is argued in Chapter 2 that the density of alcohol outlets is defined in terms of unit per population or unit per density. The study revealed that the problem of density regulation exist in the study area. A number of planning consultants interviewed recommend that the density of on-site consumption alcohol outlets must be considered per unit area. It is further the recommendation of the consultants that density regulation should remain the mandate of local government as it relates mostly to municipal/land use planning. The failure for the inclusion of guidelines for the provision of the economic amenities (e.g. alcohol outlets) in the CSIR guidelines for the provision of social facilities in South African settlements, 2012 has made it impossible for the researcher to compare existing recommended densities. Nevertheless, the formula proposed by the study should be the total number of residential dwellings units in a township (A) divided by the total number of residential dwellings units in the municipality (N) times (x) 50 over one (1), for example, if there are 17 townships in a municipality, the total number of residential dwellings units in these townships should be determined as (17 townships) say $N = \Sigma (N)$.

Formula:
$$\frac{A}{\Sigma N} \times \frac{50}{1}$$

For instance, say the total number of residential dwelling units in Emjindini Extension 11 Township is 1274 (A) and the total number of residential dwelling units in the municipality is 7535 (ΣN) the calculation of the density will be as follows:

$$\frac{A}{\Sigma N} \times \frac{50}{1} = \frac{1274}{7535} \times \frac{50}{1} = 8$$

This presents that the maximum density of on-site consumption alcohol outlets that are permitted in the Emjindini Extension 11 Township is not more than 8 outlets. It is important to note that the permitted density does not supersede the guidelines of density.

However, in a condominium type of residential development, on-site consumption alcohol outlets shall not be allowed. This may be allowed if the development on the ground floor has a restaurant. The restaurant if permitted shall serve such purpose.

5.4.3 The proposed land use compatibility factors

The approval of any on-site consumption alcohol outlet should be subject to the minimum satisfaction of compatibility performance standards. It is recommended that a proposal submitted for the establishment of an on-site consumption alcohol outlet in particular taverns should among others display the following:

- a) Measures proposed to redress the threat to individuals or infrastructure, human health, convenience and comfort by including:
 - (i) Provision of parking (local authorities to define the required parking);
 - (ii) Adequate accessibility to the facility;
 - (iii) Noise abatement measures;
 - (iv) Safety and security;
 - (v) Provision of ablution facilities for both male and female clientele and;
 - (vi) Cleaning of streets where litter is evident.

- b) Measures proposed to redress threat to ethics, values and morals and other miscellaneous factors including:
 - (i) Awareness of alcohol effects to customers;
 - (ii) Selling of liquor to the underage youth;
 - (iii) Disrespect of neighbours by customers;
 - (iv) Parking of vehicles by customers against properties of neighbours and;
 - (v) Reduction of fear amongst residents.

The location and density guidelines are indispensable in the qualification of a proposal for the establishment of on-site consumption alcohol outlet for further consideration by the liquor authority.

5.4.4 The proposed application process

The study has revealed that the liquor legislation applicable (Act, 1989) in Mpumalanga in particular, details no provision for effective public participation. However, the new Liquor Act of the Mpumalanga Province which has not been implemented yet has provision for effective public participation. The operation of on-site consumption alcohol outlets in residential communities is a “sophisticated” land use which requires consent from residents. It is recommended that effective public participation strategies be incorporated in law and policies for liquor licensing. The study recommends the following in relation to public participation:

- a) In order to appraise residents about the intent to establish an on-site consumption alcohol outlet, a notice must be published in a local newspaper in two different languages spoken in the area. Furthermore, a notice has to be affixed to the salient position of the premises.
- b) Letters of consent from neighbours within a distance of 100m from the premises, east, west, south and north direction of the property must be attained.
- c) A standard letter of consent has to be formulated which presents the details of the adjacent property owner, property description, question of consent and comments.
- d) The applicant should supply a map that concisely illustrates the properties on which consent letters were served.
- e) Pictures of notice posted on site must be part of the application.
- f) The applicant must convene a public meeting (within 35 days from the first day the notice of intent was published) with adjacent property owners where the matter is discussed and the ward councillor responsible to be invited. The minutes of such meeting must be signed by the ward councillor and contact details of the councillor to be provided.
- g) The submission of formal comments and objection period shall be 28 days.
- h) The applicant to provide proof of distribution of letters of consent to adjacent property owners.

Furthermore, the research recommends that local authorities should be considered as key in the decision making process. The authorities have to play a crucial role in assessing the compatibility performance standards (mentioned above) of proposed on-site consumption alcohol outlets. Local authorities must exercise their constitutional mandate of municipal planning effectively, noise pollution, control of public nuisance and control of undertakings that sell liquor by the adoption of policies and by-laws related thereto. In addition, the Liquor Act (provincial or national) should be

amended to explicitly articulate that local authorities must adopt guidelines or policies relating to noise pollution, control of public nuisance and control of the operations of on-site consumption alcohol outlets in general. The enforcement authority of municipalities should also be articulated in relation to liquor outlets.

6. CHAPTER 6: SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides a summary and conclusion of the research. The focus of the research was on the **critical investigation of the impact of on-site consumption alcohol outlets on the compatibility of land uses in residential areas of the Umjindi Local Municipality** in the Mpumalanga Province. On-consumption alcohol outlets are defined as including among others restaurants, bars, nightclubs taverns, and ballparks where alcohol is largely or entirely consumed at the establishment (Tatlow *et al.*, 2000:81, Bieler and Roman, 2013:2, Campbell *et al.*, 2009:556, Mackinnon *et al.*, 1995:591 and Livingston, 2008: 625). In the context of the study, the conception of on-consumption alcohol outlets is expanded to refer to on-site consumption alcohol outlets. The impact (socioeconomic) resulting from the operations of on-site consumption alcohol outlets contribute to the criticisms that are insistently levelled against them by the members of the community. These criticisms include the incompatibility of such land uses with residential areas as a result of associated unacceptable impacts (crime, traffic effects and noise pollution). In expressing the sense of discontent, residents often make submissions of complaints to the municipality regarding the impact of on-site consumption alcohol outlets in their vicinity. It is the argument of the municipality that most of the alcohol outlets within the municipality are illegal hence the number of legal and illegal alcohol outlets remains unidentified. The unavailability of policy guidelines for the location of on-site consumption alcohol outlets renders it impossible for the municipality to define their compatibility in residential areas. The study has attempted to address the following research sub-questions:

1. What is the legal mandate for providing guidelines for alcohol outlets?
2. What are the debates relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets?
3. To what extent are on-site consumption alcohol outlets densified in the Umjindi Municipal area of Jurisdiction
4. What is the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures are applied in addressing them?
5. What are the preferred and practical guidelines that should be adopted to ensure that on-site alcohol consumption outlets are compatible land uses in residential areas?

The utilitarian and availability theories were proposed in the study as guiding perspectives for the research. The utilitarian perspective is based on the calculation of utility or disutility, that is, the total calculus of pleasure or happiness that individuals enjoy from an applied activity, choice, project, action, program and policy to name a few (Taherzdeh, 2012:3). In the context of the study, it is posited that the acceptance level of a land use within a given area is defined and predicted by the acceptance level of its impacts to other land uses. On other hand, the availability theory posits that the greater the availability of alcohol (from outlets), the higher the average consumption which is also related to the higher rate of binge drinkers that have an impact on the rate of amenity effects (Palk *et al.*, 2009:32). On the basis of this backdrop of the availability theory, the study argues that the availability of high density of on-site consumption alcohol outlets contributes to the high level of drinkers and consumption in the given area which is related to amenity effects. The study therefore adopted a hypothesis which reads thus, **“the high density of on-site consumption alcohol outlets contributes to the incompatibility of such outlets with residential areas.”**

In addressing the research sub-questions and validating the research hypothesis, the study adopted several methods for the collection, analysis, interpretation and discussion of collected data. The study setting is identified as incorporating all extensions of Emjindini Townships within the jurisdiction area of the Umjindi Local Municipality. The selection of the case study area is based on two adopted criteria that consist of locality and convenience. The research design applied in the study involved the blend of qualitative and quantitative research methods. In contrast, the combination of methods included land use surveys, interviews, administration of questionnaires, literature review and document review.

Three hundred (300) questionnaires for households and 96 questionnaires for the owners/operators of on-site consumption alcohol outlets were distributed and administered in the study areas. There has been a 100% return of questionnaires due to the adoption of one-to-one interview approach for the administration of questionnaires. All liquor legislations applicable in the country have been reviewed and evaluated on the incorporation of factors such as alcohol outlet density, locality, application process (public participation) and operations. The use of ratio, mean and percentage are applied in the study as an expedient method for the analysis of data through the use of tabulation and graphs that presents the variance and relationship between study variables and case areas. The following section summarises the findings or results of the study in relation to the research sub-questions.

6.1 Summary of research results

6.1.1 Results for Research Sub-Question 1

What is the legal mandate for providing guidelines for alcohol outlets?

The Constitution of the Republic of South Africa is presented as the supreme law that guides the development, adoption and enactment of provincial laws, municipal policies and by-laws related to liquor licensing/alcohol outlets. In terms of the Constitution liquor licensing is the mandate of the provincial government while local government is mandated to deal with municipal planning, noise pollution, control of public nuisance and control of undertakings that sell liquor. In the evaluation of guidelines enshrined in provincial liquor legislation in relation to the incorporation of factors such as alcohol outlet density, locality, application process (public participation) and operations the study has revealed the following:

- a) There are no guidelines for the determination of alcohol outlet density
- b) There is inconsistency in radius determination for the location of alcohol outlets in the proximity of sensitive institutions such as religious and academic institutions and cemeteries to name a few.
- c) Guidelines or provisions for public participation in the liquor license application process are limited and sometimes absent. In particular, the Liquor Act, 1989 applicable in the Mpumalanga, North West, KwaZulu-Natal and Limpopo provinces has no effective public participation requirements. This Act restricts the applicant to only publish a notice of intent in the Government Gazette, the study debates that such tools (Government Gazette) is not accessible to the general public for appraisal.
- d) The role of local authorities (local municipalities) in the liquor application process is not fully prescribed or articulated.
- e) There are no extensive provisions made in relation to the redress of profound amenity effects during the operation of alcohol outlets.
- f) The local municipality (Umjindi) of the study area was found to be without guidelines in policy related to liquor outlet establishment and operation.

The evaluation of all provincial liquor Acts has provided an overall national score of average in the incorporation of factors such as alcohol outlet density, locality, application process (public participation) and operations. The conclusion in this regard is that there is a need to improve laws and

policies in the quest to ensure land use compatibility and reduction of profound amenity effects resulting from the existence of liquor outlets.

6.1.2 Results for Research Sub-Question 2

What are the debates relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets?

The debate relating to the impact of on-site consumption alcohol outlets in residential areas and land use compatibility cases of such outlets has clearly shown that land use planning is a conduit for addressing land use related impacts. The themes explored in the debate consist of socioeconomic impact, alcohol outlet density and land use planning which includes the discussion of conflicting land uses and the regulation of land use. It is argued in literature that socioeconomic impact are generally misunderstood with socioeconomic change processes which are not impact but, rather, change processes that lead to impact (Vanclay, 2002:191).

It is evident in the debate that the impact associated with on-site consumption alcohol outlets in residential areas in particular, as a results of outlets density include violence and assault (Livingston, 2008:619, Livingston, 2011: 517, Gruenewald *et al.*, 2006: 674 and Pridemore and Gruber, 2012:386), property crime (Teh, 2007:4), alcohol related arrest and drink-driving (Huckle, *et al.*, 2008:1615), fatal and severe alcohol traffic crashes (Campbell *et al.*, 2009: 557 and Franklin II *et al.*, 2010:284) to name a few. The debate presents that the proximity, amenity effects and demand of on-site consumption alcohol outlets in residential areas are the main factors that may guide regulation. It is the argument of authors in particular, Norton (1972:92) that the performance standards for meting land use incompatibility with a residential area are informed by the number of factors that include but not limited to the following:

- a) Threat to individuals or infrastructure including property.
- b) Threat to human health, convenience and comfort.
- c) Threat to ethics, values and morals.
- d) Threat to other related miscellaneous factors.

Land use planning is comprehensively revealed as the means to regulate alcohol outlets in residential areas in terms of density and other restrictions through zoning and other land use policies.

The regulation of alcohol outlets as a “land use” is further explained as the strategy to promote land use compatibility by discouraging or eliminating land use conflicts. It is apparent in the debate that

land use decisions, regulations and policies are considered primarily as a concern and a function of local authorities (Feiock, 2004:365, Wu and Cho, 2007:70 & Sudonienè and Matonienè, 2009:155).

6.1.3 Results for Research Sub-Question 3

To what extent are on-site consumption alcohol outlets densified in the Umjindi Municipal area of Jurisdiction?

The study spatially presented the density of on-site consumption alcohol outlets in all extensions of the Emjindini townships. The Mpumalanga Liquor Board is presented as an authority mandated to grant, revoke, suspend and refuse liquor licensing. This board indirectly and directly has full control on the number of liquor license applications that are granted licensing. The density of on-site consumption alcohol outlets in terms of liquor license approval (in Ehlanzeni District) is presented in the study per magisterial districts.

In the study areas, the density of these outlets is presented as significant in extensions (townships) of low socioeconomic status in particular the Emjindini Extension 11 Township which is estimated to have a density of 1 on-site consumption alcohol outlets for every 155 people (1 unit per 46 households). The overall density of outlets in the Emjindini Townships is estimated at 1 outlet per 78 households or 1 outlet for every 263 people. The research revealed that the Emjindini Townships have 96 on-site consumption alcohol outlets in total. Fourteen of these outlets are identified as legal with liquor licenses while 82 of on-site consumption alcohol outlets are unlawful. All unlawful outlets are confirmed as operated in properties zoned as residential without any special consent from the local authority. The study further established that one of the legal outlets in Emjindini Extension 10 Township is operated in a residentially zoned property without a special consent from the local authority. This was undisputable evidence of the fact that there is a patent deficiency of local authority involvement in the liquor application process as such is currently absent in decision making. The study revealed that although the density of outlets in Emjindini Townships is significant, on-site consumption alcohol outlets are found as a source of income for most households that hold ownership. It is the result of the research that 75% of the outlets generate a monthly income of between R0 and R 5 000 while 19% of the outlets generate a monthly income of between R 5 001 and R 10 000. Lastly, 3 % of these outlets either generates a monthly income of between R10 0001 and R15 000 or R 15 000+. The income generation factor is propounded as not justifying the density of 1 on-site consumption alcohol outlet for every 263 people in Emjindini Townships. It is the opinion of the researcher that the existing density of these outlets in the study area is significant.

The problem of regulation, land use management and enforcement is identified evident and a cause for concern in Emjindini Townships.

6.1.4 Results for Research Sub-Question 4

What are the impact experienced by the community of Umjindi in relation to on-site consumption alcohol outlets in residential areas and what measures are applied in addressing them?

The results on the impact experienced by community have been extensively discussed in terms of the level of acceptance in the study area, during the day and during the night. The impact level in the study case area (extensions of Emjindini Townships) is further discussed in terms of impact level of the low (high density of alcohol outlets) and medium (low density of alcohol outlets) socioeconomic status townships. The impacts that are argued involve the impacts related to crime, noise and accessibility, odour, values and moral related problems. Townships characterised by the significant proportion of on-site consumption alcohol outlets are found with the high proportion of responses that confirm the level of amenity effects associated with alcohol outlets as unacceptable during the night. On the other hand, the Townships characterised by the insignificant proportion of on-site consumption alcohol outlets are found with the higher number of responses that consider these townships with a significant highly acceptable level of amenity effects associated with alcohol outlets during the night. In line with the utilitarian perspective, the study reveals that there is a higher aggregate on the total number of responses that accepts the level of amenity impact during the day (in both low and high density of alcohol outlets townships).

The study revealed that the higher percentages of the unacceptable level of impact was significantly positive for the impact related to odour, social and moral related problems which may be related to the behaviour of individuals when intoxicated. The results presented on the crime impact are found to be in line with the crime statistics of Barberton which identify burglary, assault and theft as the main problematic crime categories in the study area. It is clear in the results above that burglary; assault and robbery are the main crime activities which are significantly unacceptable in the areas with higher density of on-site consumption alcohol outlets. SAPS Barberton argued that most of these crimes happen during the night and the victims specifically those of assault and robbery are victimised when they leave the on-site consumption alcohol outlets on their way back home. In view of the results that impact is mostly and profoundly experienced only during the night than during the day, it is concluded that on-site consumption alcohol outlets are compatible land uses with residential areas.

The rationale for the results is that most of the impact is found as copacetic during the day and mostly unacceptable during the night in particular, in areas where there is a higher density of on-site consumption alcohol outlets. The results revealed that the higher the density of on-site consumption alcohol outlets the more the reduction in the value or quality of life in residential areas in particular during the night.

6.1.5 Results for Research Sub-Question 5

What are the preferred and practical guidelines that should be adopted to ensure that on-site consumption alcohol outlets are compatible land uses with residential areas?

The study recommended the preferred and practical guidelines in relation to the locality, density on-site consumption alcohol outlets, compatibility performance standards for consideration and the application process for liquor licensing in relation to public participation. The study has presented that sensitive institutions include religious and academic institutions, cemeteries and areas of high population concentration generally visited by the public which include amongst others bus stations, taxi ranks, sports fields, public parks, tourist attractions and old age homes.

The location of on-site consumption alcohol outlets is preferred along major transportation route and in areas identified by the applicable land use policies (SDFs, etc) as commercial/business nodes. The location of outlets in the proximity of sensitive institutions is recommended at the distance not less than 500m and in a property not less than 500 square meters. The study has proposed alcohol out density formula which is the total number of residential dwellings units in a township (**A**) divided by the total number of residential dwellings units in the municipality (**N**) times (**x**) **50** over one (**1**). It the recommendation of the research that in assessing liquor application, the under mentioned compatibility performance standards must be considered:

- a) Measures proposed to redress the threat to individuals or infrastructure, human health, convenience and comfort.
- b) Measures proposed to redress threat to ethics, values and morals and other miscellaneous factors.

The study has recommended an improvement in the liquor licensing application process by the introduction of effective cogent measures for public participation process. Moreover, the study recommends that local authorities effectively exercise their constitutional mandate of municipal planning, noise pollution, control of public nuisance and control of undertakings that sell liquor by the

adoption of policies and by-laws related thereto. It is articulated in the research that the Liquor Act (provincially or nationally) should be amended to explicitly articulate that local authorities must adopt guidelines or policies relating to noise pollution, control of public nuisance and control of the operations of on-site consumption alcohol outlets in general. The amendments to the liquor law are further proposed to grant enforcement powers to local authorities in relation to the operation of liquor outlets.

6.2 Overall conclusion

The study covered a wide range of issues such as literature and legislation related to the topic including density and impacts associated with on-site consumption alcohol outlets. The high density of on-site consumption outlets in the study area has been found as the main factor contributing to and **not** the cause of amenity effects. In this regard, it is therefore concluded that:

- a) The high density of on-site consumption alcohol outlets significantly contributes to the incompatibility of these outlets (as land uses) with a residential area. This therefore validates the study hypothesis.
- b) On-site consumption alcohol outlets are compatible land uses with residential areas as amenity impact associated with them are only positive during the night and negative during the day in areas of high and low density of on-site consumption alcohol outlets. These outlets would have been found as incompatible if the significant positive unacceptable level of impact is experienced both during the day and during the night in areas of high and low density of on-site consumption alcohol outlets.
- c) There is a positive significant correlation between the density of on-site consumption alcohol outlets and the level of acceptance of impact associated with alcohol outlets.
- d) The high density of on-site consumption alcohol outlets is positively related to the poor quality of life during the night in low socioeconomic status townships where there is significant positive unacceptable level of impact associated with alcohol outlets.
- e) The problems associated with the high density of on-site consumption alcohol outlets in residential areas are neither ineluctable nor inexorable but, rather, they may be attenuated through density regulation.

It is the argument of the study that in order to ensure the compatibility of on-site consumption alcohol outlets with other land uses in residential areas, the guidelines of alcohol outlet density, locality and application process presented in the report may be adopted.

6.3 Recommendations for further research

The research provided the contribution in the debate of on-site consumption alcohol outlets. In order to expand on the existing debates in particular in South Africa, the following areas for future research are recommended:

- a) The longitudinal analysis of the impact of on-site consumption alcohol outlets on land use compatibility in residential areas.
- b) Cross sectional analysis of amenity effects of the density of on-site consumption alcohol outlets on the youth in particular secondary and tertiary learners or students.
- c) The cross analysis of impact of on-site consumption alcohol outlets on land use compatibility in residential areas of the rural set up and Barberton Townships of the Umjindi Local Municipality.
- d) The analysis of the history of on-site consumption alcohol outlets providing information on the date of establishment and date of establishment of sensitive institutions (schools, churches, etc.) in the proximity where the outlets exist.
- e) The density of on-site consumption alcohol outlets in the Mpumalanga Province.

APPENDIX 1: INTERVIEW SCHEDULE

COMPANY/DEPARTMENT	INVOLVEMENT	INTERVIEWEE	MONTH OF INTERVIEW
Anonymous	5x Planners- responsible for undertaking development applications, land use policies and interpretation of policies.	Anonymous	October and November 2013
Umjindi Local Municipality: Town and Regional Planner	Planner- responsible for land use planning, management, interpretation of land use planning policies and planning decision.	Anonymous	November 2013
Department of Justice: Barberton Magistrate office	Magister Officer- responsible for the facilitation of liquor licensing application process.	Anonymous	October 2013
South African Police Services: Barberton Police Station	Designated Police Officer- responsible for the assessment of liquor license applications and preparation of police reports.	Anonymous	November 2013
Mpumalanga Liquor Board	2x Liquor License Officers- responsible for the giving advice on the process for liquor licensing, inspection of liquor outlets and assessing of liquor applications.	Anonymous	October 2013

APPENDIX 2: HOUSEHOLD QUESTIONNAIRE

SOCIO-ECONOMIC IMPACT STUDY OF ON-CONSUMPTION ALCOHOL OUTLETS
IN RESIDENTIAL AREAS: HOUSEHOLD SURVEY QUESTIONNAIRE 2013-
HOUSEHOLDS

<i>EXT</i>	
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PRIVATE AND CONFIDENTIALITY

This questionnaire is for academic purposes, no person is forced to answer the questionnaire and there are no penalties or benefits for either answering or not answering any question, the interviewee has a right to stop the interview while in progress

1. Household Socio-economic details

1.1	Which type of dwelling does this household occupy? (Interviewer mark from observation)		
	Formal	1=House or formal structure on a separate stand	
		2=Flat in a block of flats	
		3=Town/ cluster/ semi-detached house (simplex/duplex or triplex	
		4=Shack, in the backyard	
		5= Shack on a separate stand	
		6=House/ flat/room, in backyard	
	Informal	7=Informal dwelling/ shack, NOT in backyard, e.g. In a squatter settlement	
		8=Informal dwelling/shack, IN the backyard of a formal house	
	Traditional	9=Traditional dwelling/hut/structure made of traditional materials	
Other	Other (Specify)		

1.2	In which radius of proximity to alcohol outlets does the property fall?	100m		600m	
		200m		700m	
		300m		800m	
		400m		900m+	
		500m		1km	
1.3	In which Age group do you fall?	15-25years			
		26-36years			
		37-47years			
		48-58year			
		59 years and above			
1.4	What is your gender?	(A). Male:		(B). Female:	

1.5	In which level educations of category do you fall?	
Education Category		
1.5.1	Less than Sub A / Grade 1	
1.5.2	Sub A – Std 1/ Grade 1-3	
1.5.3	Std 2-5 / Grade 4-7	
1.5.4	Std 6-7 / Grade 8-9	
1.5.5	Std 8-9/ Grade 10-11	
1.5.6	Matric / Grade 12	
1.5.7	Trade Certificate	
1.5.8	Diploma	
1.5.9	University	
1.5.10	Other (Specify)	
1.6	Can you tell me about your employment status? (Refers to MAIN present activity)	
Employment Status		
1.6.1	Employed, permanently, Full Time (can	

	be less than 40 hrs a week)	
1.6.2	Self-employed	
1.6.3	Contract/ Temporary	
1.6.4	Casual	
1.6.5	Unemployed	
1.6.6	Housewife	
1.6.7	Pensioner	
1.6.8	Student / Scholar / Child	

3	Can you tell me about on-consumption alcohol outlets operations in your area?		
3.1	Is alcohol in the on-consumption alcohol outlets sold to people under the age of 18?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.1.1	If no , are identification cards asked?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.1.2	If no , how is the age group identified, please explain?		
3.2	Do on-consumption alcohol outlets operations contribute to crime?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.3	Do police act swiftly when these crimes are reported?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.4	Do you consume alcohol?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.4.1	If yes , do you buy alcohol on credit?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.4.2	Does the availability of alcohol outlets in close proximity contribute to the consumption of alcohol?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.5	How do churches get affected by alcohol outlets operations?	Specify:	

3.6	How do schools get affected by alcohol outlets operations?	Specify:				
3.7	Which other institutions are affected by alcohol outlets operations?	Specify:				
3.8	Do you think on-consumption alcohol outlets are needed in residential areas?	<table border="1"> <tr> <td>Yes</td> <td></td> </tr> <tr> <td>No</td> <td></td> </tr> </table>	Yes		No	
Yes						
No						
3.9	What do you think is the cause for the mushrooming of alcohol outlets?					
3.10	Do you wish to relocate from this area as a result of the existence of alcohol outlets?	<table border="1"> <tr> <td>Yes</td> <td></td> </tr> <tr> <td>No</td> <td></td> </tr> </table>	Yes		No	
Yes						
No						

4.	Recommendations									
4.1	Do you think it is ideal to locate on-consumption alcohol outlets next to churches, schools, crèches, cemeteries etc.	<table border="1"> <tr> <td>Yes</td> <td></td> </tr> <tr> <td>No</td> <td></td> </tr> </table>	Yes		No					
Yes										
No										
4.2	If not why?									
4.3	What would be your preferred distance for location of on-consumption alcohol outlets from churches, schools, crèches, cemeteries etc?	<table border="1"> <tr> <td>0m-100m</td> <td></td> </tr> <tr> <td>100m-200m</td> <td></td> </tr> <tr> <td>200m-300m</td> <td></td> </tr> <tr> <td>300m-400m</td> <td></td> </tr> </table>	0m-100m		100m-200m		200m-300m		300m-400m	
0m-100m										
100m-200m										
200m-300m										
300m-400m										

		400m-500m																				
		500m and above																				
4.4	What would be your preferred operation time for on-consumption alcohol outlets during the week?	<table border="1"> <tr><td>24rs</td><td></td></tr> <tr><td>8pm-12am</td><td></td></tr> <tr><td>8pm-2am</td><td></td></tr> <tr><td>8pm-3am</td><td></td></tr> <tr><td>10am-10pm</td><td></td></tr> <tr><td>10am-12am</td><td></td></tr> <tr><td>10am-12am</td><td></td></tr> <tr><td>10am-2am</td><td></td></tr> <tr><td>10am-3am</td><td></td></tr> </table>	24rs		8pm-12am		8pm-2am		8pm-3am		10am-10pm		10am-12am		10am-12am		10am-2am		10am-3am		Other specify:	
24rs																						
8pm-12am																						
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8pm-3am																						
10am-10pm																						
10am-12am																						
10am-12am																						
10am-2am																						
10am-3am																						
4.5	What would be your preferred operation time for on-consumption alcohol outlets on weekend and public holidays?	<table border="1"> <tr><td>24rs</td><td></td></tr> <tr><td>8pm-12am</td><td></td></tr> <tr><td>8pm-2am</td><td></td></tr> <tr><td>8pm-3am</td><td></td></tr> <tr><td>10am-10pm</td><td></td></tr> <tr><td>10am-12am</td><td></td></tr> <tr><td>10am-12am</td><td></td></tr> <tr><td>10am-2am</td><td></td></tr> <tr><td>10am-3am</td><td></td></tr> </table>	24rs		8pm-12am		8pm-2am		8pm-3am		10am-10pm		10am-12am		10am-12am		10am-2am		10am-3am		Other specify:	
24rs																						
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8pm-3am																						
10am-10pm																						
10am-12am																						
10am-12am																						
10am-2am																						
10am-3am																						
4.6	Do you think it is necessary for adjacent owners to be consulted before approval for on-consumption alcohol outlets are granted?	Yes No																				

4.7	If yes why?	
4.8	What else do you think should be done to regulate on-consumption alcohol outlets?	
4.9	What should be done to improve the compatibility of on-consumption outlets with residential areas?	

5. Socio-economic impacts (DURING THE DAY)

No	Impact factor	Level of Impact				
		Not accepted	Least Acceptable	Neutral	Accepted	Highly Acceptable
1	Criminal activities					
1.1	Rape					
1.2	Burglary					
1.3	Assault					
1.4	Hijack					
1.5	Robbery					
1.6	Other crimes					
2	Social and Moral Problems					
2.1	Vandalism					
2.2	Gangsters					
2.3	Fights					
2.4	Use of profanity to residents by outlets' clients					
2.5	Drunkenness					
2.6	Drug addiction					
2.7	Prostitution					
3	Noise					
3.1	Music from cars					

3.2	Music from outlets					
3.3	Traffic Jam					
3.4	Vehicle horn					
3.5	Outlets customers					
3.6	Car spinning					
3.7	Gun shots					
4	Odour					
4.1	Vomiting on street/ residents yards					
4.2	Urination on street/residents yards					
4.3	Garbage					
4.4	Smoke from vehicle					
4.5	Cooking on street					
4.6	Cooking on premises					
5	Cleanliness of outlets location					
5.1	Cleanliness of outlets streets during the day					
5.2	Cleanliness of outlets streets in the morning					
6	Location of facilities next to community facilities					
6.1	Religious/Churches					
6.2	Schools					
6.3	Clinics					
6.4	Government facilities/offices					
6.5	Taxi ranks					
6.6	Shopping areas					
6.7	Parks/recreational facilities					
6.8	Eating outlets					

6.9	Community halls					
7	Accessibility					
7.1	Disturbance of pedestrian walkways					
7.2	Disturbance of residence vehicles					
7.3	Disturbance of public vehicles (i.e. taxis)					
8	Police visibility					
9	Social cohesion					
9.1	Bring people together					
9.2	Sense of belonging					
9.3	Safety					
9.4	Social benefits					
10	Damage on infrastructure					
10.1	Street lights					
10.2	Street furniture					
10.3	Fire hydrate					
10.4	Road					
10.5	Community facilities					
10.6	Damage on residents property					
11	Economic factors					
11.1	Job creation					
11.2	Contribution to local economy					

6. Socio-economic impacts (AT NIGHT)

No	Impact factor	Level of Impact				
		Not accepted	Least Acceptable	Neutral	Accepted	Highly Acceptable
1	Criminal activities					
1.1	Rape					
1.2	Burglary					
1.3	Assault					
1.4	Hijack					
1.5	Robbery					
1.6	Other crimes					
2	Social and Moral Problems					
2.1	Vandalism					
2.2	Gangsters					
2.3	Fights					
2.4	Use of profanity to residents by outlets clients					
2.5	Drunkenness					
2.6	Drug addiction					
2.7	Prostitution					
3	Noise					
3.1	Music from cars					
3.2	Music from outlets					
3.3	Traffic Jam					
3.4	Vehicle horn					
3.5	Outlets customers					
3.6	Car spinning					
3.7	Gun shots					
4	Odours					
4.1	Vomiting on street/ residents yards					
4.2	Urination on street/residents					

	yards					
4.3	Garbage					
4.4	Smoke from vehicle					
4.5	Cooking on street					
4.6	Cooking on premises					
5	Cleanliness of outlets location					
5.1	Cleanliness of outlets streets during the day					
5.2	Cleanliness of outlets streets in the morning					
6	Location of facilities next to community facilities					
6.1	Religious/Churches					
6.2	Schools					
6.3	Clinics					
6.4	Government facilities/offices					
6.5	Taxi ranks					
6.6	Shopping areas					
6.7	Parks/recreational facilities					
6.8	Eating outlets					
6.9	Community halls					
7	Accessibility					
7.1	Disturbance of pedestrian walkways					
7.2	Disturbance of residence vehicles					
7.3	Disturbance of public vehicles (i.e. taxis)					
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9.1	Bring people together					

9.2	Sense of belonging					
9.3	Safety					
9.4	Social benefits					
10	Damage on infrastructure					
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10.2	Street furniture					
10.3	Fire hydrate					
10.4	Road					
10.5	Community facilities					
10.6	Damage on residents property					
11	Economic factors					
11.1	Job creation					
11.2	Contribution to local economy					

APPENDIX 3: TAVERN OWNES'S QUESTIONNAIRE

EXT	
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SOCIO-ECONOMIC IMPACTS STUDY OF ON-CONSUMPTION ALCOHOL OUTLETS IN RESIDENTIAL AREAS: HOUSEHOLD SURVEY QUESTIONNAIRE 2013-TAVERN OWNERS

PRIVATE AND CONFIDENTIALITY

This questionnaire is for academic purposes, no person is forced to answer the questionnaire and there are no penalties or benefits for either answering or not answering any question, the interviewee has a right to stop the interview while in progress.

1.1	Which type of building does the tavern occupy? (Interviewer mark from observation)			
	Formal	1=House or formal structure on a separate stand		
		2=Flat in a block of flats		
		3=Shop		
		4=House/ flat/room, in backyard		
	Informal	5=Informal dwelling/ shack, NOT in backyard, e.g. In a squatter settlement		
		6=Kiosk		
		7=Informal dwelling/shack, IN the backyard of a formal house		
	Traditional	8=Traditional dwelling/hut/structure made of traditional materials		
Other	Other (Specify)			
1.2	Is the owner of the tavern renting or owning the property?	<i>Renting</i>		
		<i>Owning</i>		
	Is the owner of the tavern male or female?	<i>Male</i>		
		<i>Female</i>		
1.3	What activities are undertaken on the property?			

		<i>Tavern only</i> <i>Tavern and residential</i> <i>Tavern and bottle store</i> <i>Tavern and general dealer</i> <i>Tavern and Restaurant</i>	<input type="checkbox"/> <input type="checkbox"/>	
1.4	If property is used for both tavern and residential space, what percentage of the property is used for tavern purposes ?	10-25% 26-49% 50-100%	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
1.5	Is food sold in the premises?	Yes No	<input type="checkbox"/> <input type="checkbox"/>	
1.6	How many parking bays are available on the property?	1-5 5-10 10 and above None	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
1.6.1	Do customers' cars park outside the property?	Yes No	<input type="checkbox"/> <input type="checkbox"/>	
1.7	Do the tavern premises have a barricading wall?	Yes No	<input type="checkbox"/> <input type="checkbox"/>	
1.8	How many Males and Females' toilets are there in the tavern?	(A). Male: 	(B). Female: 	

2	Can you tell me how many people are employed in this tavern?				
	Employment Status	Males		Females	
	Employed, permanently, Full Time (can be less than 40 hrs a week)	1		1	
	Casual	2		2	
	Temporary/Contract	3		3	

3	Can you tell me about the tavern operations?						
3.1	In which year did you start operating the tavern?	1999		2004		2009	

		<table border="1"> <tr> <td>2000</td><td></td><td>2005</td><td></td><td>2010</td><td></td></tr> <tr> <td>2001</td><td></td><td>2006</td><td></td><td>2011</td><td></td></tr> <tr> <td>2002</td><td></td><td>2007</td><td></td><td>2012</td><td></td></tr> <tr> <td>2003</td><td></td><td>2008</td><td></td><td></td><td></td></tr> </table>	2000		2005		2010		2001		2006		2011		2002		2007		2012		2003		2008			
2000		2005		2010																						
2001		2006		2011																						
2002		2007		2012																						
2003		2008																								
		Other specify:																								
3.1.1	Do you have a Liquor License? If Yes answer the question 3.1.2 below and if No answer question 3.1.3	<table border="1"> <tr> <td>Yes</td><td></td></tr> <tr> <td>No</td><td></td></tr> </table>	Yes		No																					
Yes																										
No																										
3.1.2	What type of liquor license does the tavern hold? And what are the operation time in terms of the license, specify:	<table border="1"> <tr> <td>Off premises</td><td></td></tr> <tr> <td>On premises</td><td></td></tr> <tr> <td>Special event</td><td></td></tr> <tr> <td>Other specify</td><td></td></tr> </table>	Off premises		On premises		Special event		Other specify																	
Off premises																										
On premises																										
Special event																										
Other specify																										
3.1.3	Have you ever received any fine contradicting liquor law from authorities?	<table border="1"> <tr> <td>Yes</td><td></td></tr> <tr> <td>No</td><td></td></tr> </table>	Yes		No																					
Yes																										
No																										
3.1.3	Have you applied for a liquor license?	<table border="1"> <tr> <td>Yes</td><td></td></tr> <tr> <td>No</td><td></td></tr> </table>	Yes		No																					
Yes																										
No																										
3.2	Was there any time when the tavern stopped operating? If yes, specify the reasons:	<table border="1"> <tr> <td>Yes</td><td></td></tr> <tr> <td>No</td><td></td></tr> </table>	Yes		No																					
Yes																										
No																										
3.3	What type of alcohol do you sell?	<table border="1"> <tr> <td>Traditional</td><td></td></tr> <tr> <td>Bottled</td><td></td></tr> <tr> <td>beer/wine</td><td></td></tr> <tr> <td>Or Both</td><td></td></tr> </table>	Traditional		Bottled		beer/wine		Or Both																	
Traditional																										
Bottled																										
beer/wine																										
Or Both																										
3.3	How many crates of liquor/24 set of liquor do you keep at any given time?	<table border="1"> <tr> <td>1</td><td></td></tr> <tr> <td>1-2</td><td></td></tr> <tr> <td>2-5</td><td></td></tr> <tr> <td>5-10</td><td></td></tr> <tr> <td>10+</td><td></td></tr> </table>	1		1-2		2-5		5-10		10+															
1																										
1-2																										
2-5																										
5-10																										
10+																										

3.4	On which days is the tavern operated?	Monday- Sunday Thursday- Sunday Sunday- Thursday Thursday- Saturday Friday- Saturday Friday-Sunday	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
3.5	At what time does the tavern start operating?	6am-8am 9am-10am 11am and above	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
3.6	At what time does the operation of the tavern stops during the week?	10pm 11pm 12am 1am 2am 3am 4am other (Specify)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
3.7	At what time does the operation of the tavern stop on weekend and public holidays?	10pm 11pm 12am 1am 2am 3am 4am	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

		other (Specify)	
3.8	Do you think the tavern is in an ideal location?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.9	If the answer is no why?	Specify	
3.10	Is alcohol in the tavern sold to people under the age of 18?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.11	Does the tavern have the sign for age restriction?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.12	Do tavern operations contribute to crime?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.13	Do you know of any cases of crime that took place in the tavern or along streets where tavern is located?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.14	If yes, what was the nature of crime?	Murder Assault Burglary Rape On spot robbery Other (specify)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.15	Is there any car accident that has ever happened along the road of your property?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.15	Does the tavern have a dedicated security guard?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.16	Is there police visibility in area where tavern is located?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.17	Do police act swiftly when these crimes are reported?	Yes No	<input type="checkbox"/> <input type="checkbox"/>
3.18	Have you ever received any complaint about the operations of the tavern?	Yes No	<input type="checkbox"/> <input type="checkbox"/>

	<p>If yes, what was the nature of the complaint(s)?</p> <p>Specify:</p>						
3.19	In what income range does your tavern fall per month?	<p>0-R 5000</p> <p>R5 001-R10 000</p> <p>R10 001-R15 000</p> <p>R15 001 and above</p>	<table border="1"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>				
3.20	How many people buy on credit per month?	Specify					
3.21	<p>Do you play musical instruments on the premises?</p> <p>If yes answer 3.21.1 and 3.21.2 below.</p>	<p>Yes</p> <p>No</p>	<table border="1"> <tr><td></td></tr> <tr><td></td></tr> </table>				
3.21.1	What are measures put in place to control noise from the instrument?	Specify:					
3.21.2	What type of instrument do you have	<p><i>Jukebox</i></p> <p><i>Musical systems outside walls of premises e.g. speakers</i></p> <p><i>Other specify:</i></p> <table border="1"> <tr><td></td></tr> <tr><td></td></tr> </table>					

4	What would be your recommendations for tavern regulations?							
4.1	Do you think it is ideal to locate taverns next to churches, schools, crèches, cemeteries etc.	<p>Yes</p> <p>No</p>	<table border="1"> <tr><td></td></tr> <tr><td></td></tr> </table>					
4.2	If no why?	Specify:						
4.3	What would be your preferred distance for location of taverns from churches, libraries, schools, crèches, cemeteries etc?	<p>0m-100m</p> <p>100m-200m</p> <p>200m-300m</p> <p>300m-400m</p> <p>400m-500m</p>	<table border="1"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>					

	for taverns is granted?		
4.7	In which year was the health/business permit issued for this tavern?	Specify:	

APPENDIX 4: ETHICAL CLEARANCE LETTER



29 November 2013

Mr Bongane Cornelius Ntiwane 2135716557
School of Built Environment & Development Studies
Howard College Campus

Protocol reference number: HSS/0925/013M

Project title: The critical investigation of the impacts of on-consumption alcohol outlets on land use compatibility in residential areas in the Umjindi Local Municipality area of jurisdiction, Mpumalanga Province.

Dear Mr Ntiwane

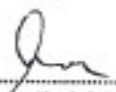
Expedited Approval

I wish to inform you that your application dated 13 June 2013 has now been granted Full Approval.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **Please note:** Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully


.....
Dr Shenuka Singh (Chair)

/ms

cc Supervisor: Professor M Dayomi
cc Academic Leader Research: Professor Franco Frescura
cc School Administrators: Mrs Meera Dalthaman

Humanities & Social Sciences Research Ethics Committee

Dr Shenuka Singh (Chair)

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Website: www.ukzn.ac.za



Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

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